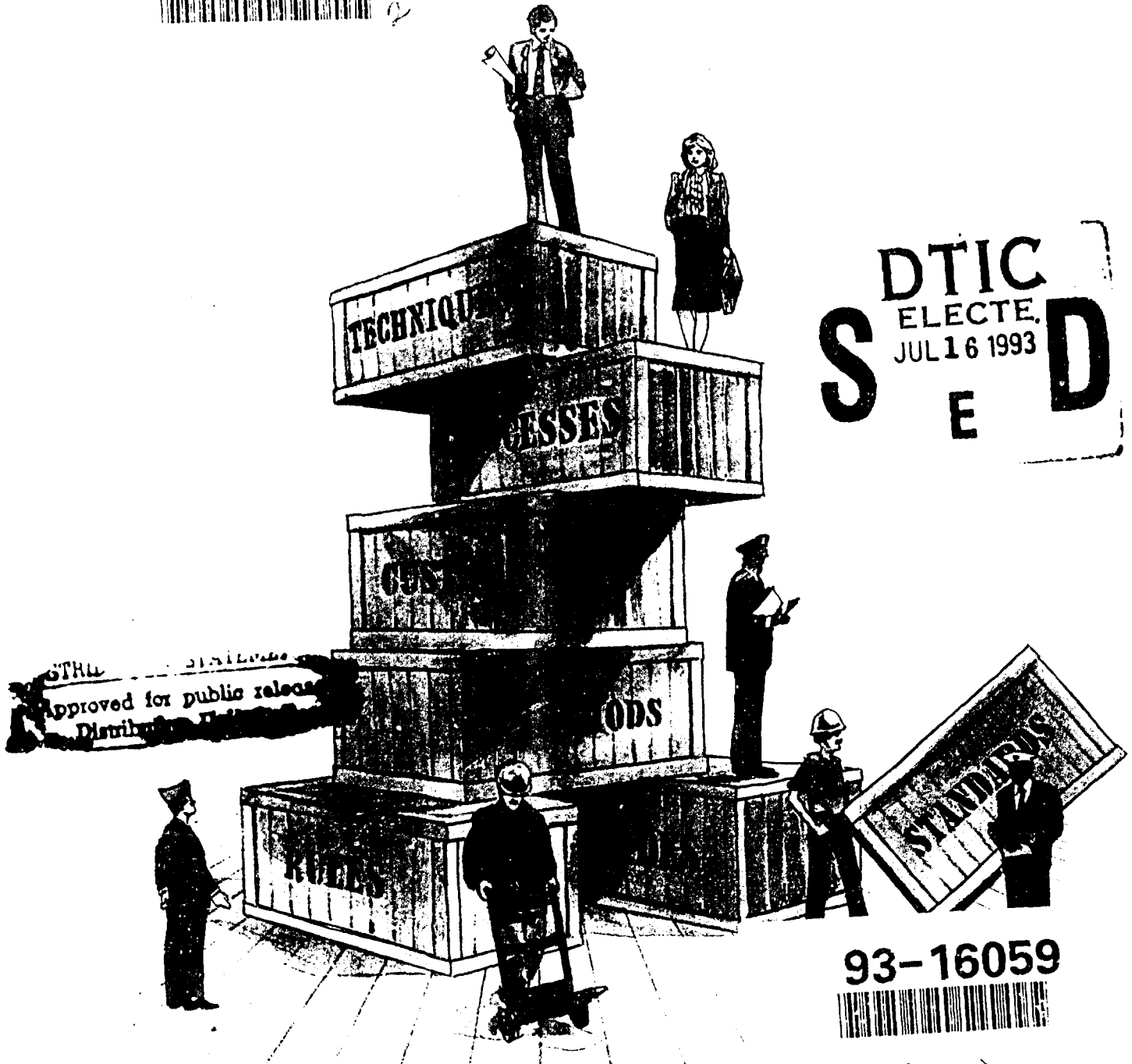
DEFENSE SYSTEMS MANAGEMENT COLLEGE

COMMERCIAL PRACTICES FOR DEFENSE ACQUISITION GUIDEBOOK



COMMERCIAL PRACTICES FOR DEFENSE ACQUISITION GUIDEBOOK

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FOREWORD

This guidebook was developed by ANSER Corporation, Suite 800, 1215 Jefferson Davis Highway, Arlington, Virginia 22202 under Contract MDA903-89-C-0260 directed by DSMC. The lead researcher and principal author was Dean (Dusty) Rhoads. Major contributors were Jennifer Breon, Ed Robinson, Janice Parsek, and Neal Kochman.

A number of Government and industry personnel provided assistance through interviews, background material, and consultation. Special mention is made of the following organizational representatives who, with their associates, performed detailed reviews of the drafts of this guidebook: Greg Saunders (OSD), Sandy Rittenhouse (ARMY), and Charles Sanders (NAVY). The authors would like to thank all participants and the personnel and faculty of DSMC; especially Tom Withers, Frank Meneely, and Norm McDaniel whose guidance and suggestions were most helpful.

Numerous studies, reports, and other references were consulted during the study; and on a non-attribution basis, many spokespersons were interviewed individually and as representatives of Government organizations and contractor associations and groups. Their assistance and views were very helpful throughout the study.

Whenever in this publication "man," "men," or their related pronouns appear, either as words or parts of words (other than with obvious reference to named male individuals), they have been used for literary purposes and are meant in their generic sense.

The Defense Systems Management College is the controlling agency for this guidebook. Comments and recommendations related to this guidebook's contents are solicited.

Calvin Brown
Professor of Engineering Management
Defense Systems Management College
January 1992

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EXECUTIVE SUMMARY

The notion that adoption of commercial practices can improve defense acquisition is generally accepted. However, concise, readily available information and guidance, specifically designed with the objective of enabling DOD program managers to adopt commercial practices, is currently lacking. To help fill this gap, the Defense Systems Management College (DSMC) initiated a study of commercial practices with the goal of identifying practices that may be useful to DOD program managers. Documenting the study resulted in this guidebook. No major revelations in the commercial practices and inhibitors were identified during the study. Individual practices are generally known in the acquisition community and are practiced in various forms and to differing degrees. However, uniform widespread adoption and use of commercial practices in DOD does not exist since there is no readily available reference source of information for them or publicity about them and their inhibitors.

Usual commercial acquisition practices, procedures, and contracts differ from those used by the Government and in many instances differ from those used by commercial businesses to sell to the Government. For this study, commercial practices do not include those practices necessitated as a result of selling to the Federal Government since they would probably not exist in the absence of Government buying activities. Commercial practices are those activities for accomplishing goals and objectives which differentiate the commercial sector from the Federal Government sector. The following working definition of commercial practices was used for the study:

> **Commercial practices are** techniques, methods, customs, processes, rules, guides, and standards **normally used by business, but either applied differently or not used by the Federal Government.**

A number of commercial practices and inhibitors are described in this guidebook. It contains a discussion of them and of other aspects of the study, such as the effects of a specific inhibitor on a commercial practice or traceability of inhibitors to sources in regulations and/or public law. The guidebook is intended to be used in DSMC courses to help educate DOD program managers in adopting commercial practices, however, the entire acquisition community may benefit from using it. Prudent adoption

of some or all of the practices discussed in this guidebook has the potential of realizing cost and schedule savings on acquisition programs throughout the Government. Publication of this guidebook will provide a readily accessible collection of information on commercial practices and their inhibitors applicable to DOD acquisition which can be used and updated through experience. It may be a catalyst for identifying additional commercial practices for Government use and for promoting broader acceptance and adoption.

The commercial practices identified during this study and discussed in this guidebook fall into the following areas:

1. Market Research and Surveys
2. Best Value
3. Supplier Relationships
4. Contracting Practices
5. Documentation and Specification Practices
6. Warranties
7. Inventory Management and Commercial Distribution Systems
8. Nondevelopmental Items (NDI)
9. Programmatic Practices

Adoption of a number of the identified commercial practices are inhibited by corresponding DOD/Government practice, i.e., the Government's normal "business" practices are themselves inhibitors to adopting commercial-like "business" practices. For example, the Government's traditional specification practices inhibit the commercial practice of functionally specifying requirements.

The appropriate inhibitors are discussed in each chapter as they relate to the subject chapter commercial practice, while Appendix A contains a general description of each inhibitor. Many of the inhibitors identified during the development of the guidebook are, in fact, being reduced or eliminated through recent legislative and regulatory reforms prompted by advisory panels and acquisition initiatives in Congress, the Federal Government, and DOD. Efforts now need to be focused on educating the acquisition work force on the new policies and practices.

The inhibitors to commercial practices discussed in this guidebook are:

1. Competition Practices
2. Formality of the Government Acquisition Process
   - A. Contracting
   - B. Planning and Budgeting
   - C. Acquisition Management
3. Contract Clauses
   - A. Government-Unique Clauses
   - B. Multitudinous Clauses
   - C. Flow Down of Contract Terms and Conditions
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9. Cost Based Buy Decisions
10. Protest System/Process
11. Audit Rights
12. Quality Assurance, Quality Control, and Inspections
13. Warranties
14. Delays in Prompt Payment
15. Preference for New Development Versus Nondevelopmental Items
16. Inadequate Acquisition Training

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

The 1986 Packard Commission Final Report and the Defense Science Board 1986 Summer Study concluded that the use of commercial practices in the DOD acquisition process had a potential for saving vast amounts of money. The 1986 Defense Science Board said, "The Program Manager should have discretionary authority to use commercial practices and products when appropriate." (64:62)

[NOTE: The footnote convention used in this guidebook is a two-part identifier. The number preceding the colon refers to the number of the reference listed in the Appendix F Bibliography. The alpha-numeric/s following the colon is/are the page/s of the citation. When there is no colon, the reference is for an entire work and the number is the item number in the Bibliography.]

Standard commercial acquisition practices, procedures, and contracts differ from those used by the Government and, in many instances, differ from those used by commercial businesses to sell to the Government. Different goals and objectives are an underlying cause for the differences in practices between the commercial and Government sectors. For example, in the private sector prices are established by competitive demand in the open market, not by cost analysis as is often done when the Government is the buyer.

Another difference is the Government procurement process is usually stimulated by Government solicitations to buy rather than by a vendor's offers to sell. The Government says, "This is what I want to buy." Sellers say, "This is what I have to sell." Both approaches require an understanding of customer needs and both exist in the commercial sector. However, the "buy model" overwhelmingly dominates

the Government sector where needs are usually expressed in specifications or purchase descriptions of end product performance and do not include customer services and other assistance normally offered to buyers in the commercial sector. These are not usually an important factor in most Government buy decisions.

The Government acquisition process may currently be characterized as,

Based on a concept of fairness in competition by fostering full and open competition,

Biased in the use of detailed contract and specification requirements in order to ensure as much as possible that the purchased item will be acceptable,

Detailing requirements to the extent that buyers are unable to take advantage of the most innovative solutions and the most efficient suppliers,

Conforming to laws and regulations (governing Government contracting) which are significantly different from and exceed what is the norm for commercial contracting.

These are only a few of the differences between the Government and the private sector and are intended to only be illustrative, i.e., draw attention to the differences between the commercial and Government sectors. Other differences are included in the descriptions of the commercial practices and inhibitors in this guidebook. Thoughtful consideration of these may provide insights into improving DOD acquisitions through adoption of commercial practices.

1.1.1 Definition of Commercial Practices

Commercial practices are techniques, methods, customs, processes, rules, guides and standards **normally used by business, but either applied differently or not used by the Federal Government.**

In this guidebook commercial practices do not include those necessitated as a result of selling to the Federal Government. Commercial practices encompass the full range of practices, from ethical practices such as use of business lunches, acceptance of gifts and conflicts of interest, to engineering practices, buying practices, manufacturing/fabrication processes, and testing. In the context of this guidebook, commercial practices are those methods and techniques used by firms when acting as buyers rather than sellers in the marketplace. This includes development and construction activities for projects undertaken by a firm using its own resources and being accountable only to itself and its owners. These commercial practices do not carry any guarantees. Evaluating their potential use may provide useful insights into planning and implementing an effective defense acquisition project or program.

1.1.2 Guidebook and Study Scope

The focus of the study and this guidebook is acquisition. Its scope is therefore limited to commercial practices potentially applicable to defense acquisition. The study recognized, but did not encompass, the kinds of practices identified in the Navy "best manufacturing practices" program (Re: Office of the Assistant Secretary of the Navy, Shipbuilding and Logistics). The same is true of the "best practices"

identified by the Rittenhouse Acquisition Streamlining Task Force, Defense Science Board Study 1990-1991.

Buying commercial items is often thought of synonymously with buying non-developmental items (NDI), but they are not the same. Commercial items are a sub-set of NDI. Another confusing point is that commercial practices are often thought of only in the context of buying commercial items. There is a great potential payback when commercial practices are employed in acquiring commercial items, however, commercial practices are also potentially significant in realizing productivity gains and lower costs in all forms of DOD acquisitions. There is a lot of commonality in discussing all three; commercial items, NDI, and commercial practices, but the reader is advised to keep in mind that this guidebook is focused on applying commercial or commercial-like practices to all forms of Government acquisitions. The guidebook describes commercial practices that are potentially useful to DOD program managers, identifies pros and cons in their adoption, and presents strategies for their adoption. Inhibitors and impediments to the adoption of the commercial practices are described and the source requirement for the impediments are identified in law and/or regulations, e.g., FAR, DFARS, etc.

The sequence of the inhibitors in the guidebook is not intended to imply a rank ordering or relative importance. Inhibitors can generally be considered as belonging to one of the following categories: the inhibitor is the counterpart to an existing Government practice; the inhibitor forbids a commercial practice by the Government; the inhibitor is a Government right or mandatory activity (founded in law) which must either be modified or rescinded in order to adopt the commercial practice; or the inhibitor is a "usual" Government practice which interferes with or complicates the effective adoption of the commercial practice. How an inhibitor inhibits a commercial practice is discussed in the guidebook. It contains the descriptions of how a commercial practice is specifically "discouraged" from being adopted by a specific inhibitor.

Nine chapters are devoted to discussion of each of the nine discretely identified commercial practices. Each chapter describes a single commercial practice, although some chapters include a breakdown of practices into lower level practices, e.g., several programmatic practices are described in Chapter 10, Programmatic Practices. Each chapter presents a description of the commercial approach to the practice first, followed by a description of the analogous Government practice, and then a discussion of some pros and cons of Government adoption of the commercial practice. This is followed by a list of the inhibitors to the commercial practice and a discussion of the relationship of the pertinent inhibitors to the practice. Strategy is then presented for Government adoption of the commercial approach and some possible methods of coping with the inhibitors. This is followed by a discussion of some of the related commercial practices since many of them are inter-related and can not be considered singularly in isolation. Each chapter concludes with a list of the references in the bibliography (Appendix F) that pertains to the practice.

1.2 ADVANTAGES IN USING COMMERCIAL PRACTICES

Adoption of commercial practices may be a partial solution to the program manager's dilemma of balancing the need to provide fair and equal opportunity to sell to the Government with the need to extract "best value" from the process. The following were often mentioned as potential advantages of adopting commercial practices: cost savings on initial acquisition and throughout the life cycle, higher quality, improved technology, enhanced support capability, socioeconomic benefits, shortened schedules, and enhanced performance. (1:16)

However, a word of caution is in order. While there are advantages to adopting commercial practices, they are not a panacea. Common sense must be the watch word in adopting any practice, commercial or noncommercial. The true value of adoption can be seen only after examination of its situational advantages and disadvantages.

Finally, it is implicitly assumed that the commercial practices discussed in this guidebook are being practiced in a commercial marketplace *with* competition. If there is inadequate competition or a lack of freely operating mechanisms to regulate a marketplace, then the validity of the commercial practices would need to be reexamined. Many of the most effective commercial practices owe their success to the pressures of competition to balance supply and demand and a fair return for value tendered.

1.3 DISADVANTAGES IN USING COMMERCIAL PRACTICES

Generally, the disadvantages with adopting commercial practices are rooted in the inhibitors which require management attention to cope with and which might entail programmatic risk through less micro-management. Three categories of this type of disadvantage are quality problems, supportability issues, and socio economic factors. (1:22)

Some drawbacks in adopting commercial practices for defense acquisition stem from fundamental systemic differences between acquisitions in the commercial and DOD sectors of the economy. Retired Air Force General Lawrence A. Skantze provided some insights into the differences in an article he wrote for the *Inside View* column in the *Defense News*. He identified characteristics which differentiate defense acquisition from commercial industry. Two of interest to this study were the following:

> Guaranteed systemic funding instability and the transitional nature of DOD leadership and their lack of industrial experience in complex technology development. (74:28)

A major drawback, or challenge depending on your view, is the need for careful planning that recognizes the differences between the Government and commercial sectors and a need for a sustained commitment of management energy to prevail in execution. Education and guidance in adopting commercial practices will help, but the process will be difficult and the results not always readily apparent to a short term evaluation perspective.

Finally, adopting commercial practices without using good judgement might also potentially entail personal liability through failure to comply with legal requirements, particularly those associated with fraud, waste, and abuse.

1.4 APPENDICES

Appendix A contains a generalized description of each of the inhibitors. Appendix B contains the regulatory and, in some cases, the statutory basis for each inhibitor with pertinent passages from them extracted for quick reference by the guidebook reader. Appendix C contains cross references relating commercial practices to their inhibitors, commercial practices to each other, and a table listing some statutory and regulatory bases for each inhibitor. Appendix D discusses the new DFARS 211 rule on contracting for commercial items, and its potential impacts on the discussed commercial practices and inhibitors. Appendix E is not completed, but is being reserved for a case study on the adoption of commercial practices on the Air Force Desktop IV program. Appendix F is a complete bibliography of the numerous written sources consulted during the course of the guidebook development.

CHAPTER 2

MARKET RESEARCH AND SURVEYS

2.1 COMMERCIAL APPROACH

Market research and surveys are essential to a firm's survival. They are usually a part of the normal, continuous, ongoing activity of a business enterprise. They are used to determine the availability of products and sources, the extent of competition, the range of product performance characteristics, market acceptability, current market prices, and the range of available distribution systems and support services. The objective is to determine what is available, or potentially available, to satisfy user needs. (55) Efficient market research starts with a good understanding of user or customer needs. Some firms actively engage in dialogue with the ultimate consumer and involve the consumer in defining the requirements to be satisfied to ensure that what is delivered is what was needed.

In addition to satisfying buying goals, market surveys are also used to realize seller goals. Firms use market research not only to help ensure best value at the best price, but also to identify business opportunities (unsatisfied needs) and product acceptance, to establish competitive pricing structures, and to develop product "bundling" and packaging strategies.

Market research and the resulting knowledge of what is available in the marketplace are also used to help firms understand and define their needs. Once the data is collected and analyzed, a decision must still be made on which, if any, of the available products adequately satisfies the needs of the acquisition. Some industry sources cite that the most important factor in selecting one product over another is the timeliness of the product. Often decisions are based on the innovative nature of a particular product. Dr. Allan V. Burman of the Office of Management and Budget in a testimonial statement to the Senate Subcommittee on Oversight of Government Management

claimed that, "On the commercial side...it seems not minimum needs, but innovation is rewarded and firms benefit from anticipating customer needs, rather than responding to minimum requirements." (78:4)

Many techniques are employed to keep abreast of marketplace developments. They range from informal practices such as reading catalogues, sales literature, periodicals, and reports; listening to sales pitches; or attending trade shows, fairs, and symposiums; to formal practices such as conducting studies, surveys, and interviews using sophisticated instruments.

2.1.1 Market Information Sources

The following are typical sources of market information:

- Industry publications
- Catalogs and product data brochures (manufacturers, distributors, and dealers)
- Unsolicited proposals and sales/product literature
- Trade shows and industry workshops
- Company annual reports and 10K reports
- Compilation guides and registers (e.g.,Dunn & Bradstreet, Thomas Register, etc.)
- Company visits, briefings, and presentations
- Discussions with company/industry representatives (marketing)
- Attendance at seminars and training courses
- Journals
- Symposia proceedings
- Participation in professional societies and associations
- Participation in standardization committees (e.g., IEEE, ANSI, ISO)
- Independent research and development results/reports
- Test results/data/reports
- Patent searches
- Government/Industry Data Exchange Program (GIDEP)

2.1.2 Market Research Objectives

The focus of market research is two-fold. One focus is on product attributes and characteristics and the other is on the attributes of the firm offering the product. The bottom line in identifying attributes of potentially available products is, "Does the product satisfy the needs?" In this context, needs include price as well as the technical/performance requirements.

2.1.2.1 Product Attributes

In addition to the obvious technical performance requirements such as size, weight, speed, etc., the following attributes are also typically considered:

- What is included with the product?
  - Service/support?
  - Installation and check-out support?
  - Training?
  - Data (user/maintenance manuals, etc.)?
  - Warranty terms and conditions?
  - Packaging?
  - Storage?
  - Transportation?
- Product life (average model life/average time between model changes, length of time produced, projected obsolescence, number of models produced, etc.)
- Time to buy (How long does it take to receive delivery?)
- Product distribution channels
- Shelf life
- Environmental effects of product use

2.1.2.2 Firm Attributes

The second focus of market research is on the firms providing the products. When there are comparable competing products, the deciding factors in the buy decision could be the differences in the firms offering them.

Tangible factors could typically include:
- Firm size
- Capital structure (debt and equity)
- Location (distribution points, service centers, etc.)
- Product market share
- Capabilities (production, service, etc.)
- Manufacturer's commitment to outyear support/service
- Business base (What kind of items does the firm produce, i.e., what is the business of the firm?)
- How long has the firm been in business?
- How long has the firm been producing the subject product?

Intangible factors could typically include:
- Reputation for
  - Quality
  - Product performance
  - Service
  - On-time delivery
- Warranty compliance and practices
- Cooperation and willingness to work with customers
- Spare part availability practices
- General business practices (e.g., invoice and payment, dispute resolution, etc.)

2.2 GOVERNMENT APPROACH

The Government has also adopted the practice of market research and analysis. The FAR calls for the conduct of market analysis to determine the availability of products in the marketplace for Government use. FAR 11.003 says that market research and analysis can be used to help determine whether products, distribution systems and support are available in the marketplace. FAR 11.004 provides specific details on what the Government means by market research and analysis. The following are some of its objectives:

- Identify market practices including warranty terms.
- Help ensure full and open competition.
- Meet Government needs in a cost effective manner.

To realize these objectives, the following kinds of information are usually obtained:

- Product availability (as is or with minor modification)
- Terms and conditions of sale (including warranty practices)
- Requirements of controlling laws and regulations
- Number of sales and length of time over which they must occur to provide reasonable assurance that the product is reliable
- Distribution capabilities (supplier and alternate)
- Support capabilities (supplier and alternate)
- Potential cost of modifying an existing item to meet particular needs

In many ways the conduct of market surveys and analysis is similar in and out of the Government. Most of the commercial approach described above also applies to the Government, with the Government accessing sometimes unique sources of information, for example, Government laboratories whose research may not usually be available to the

general public. The Government task is potentially broader in the sense that its surveys should also include the existence and availability of items in the DOD or other Government inventories, as well as available in the inventories of an allied government. In another sense the Government task is simpler since it is not concerned with the seller's needs to be aware of the marketplace conditions. Sources of market data which may be more prominent to the Government than commercial firms include the following:

- Federal Catalog System
- General Services Administration catalogs
- General Accounting Office reports
- Defense Logistics Agency catalogs
- Source lists for items of a similar nature maintained at contracting activities
- Responses to advance notices and solicitation synopses published in the *Commerce Business Daily*
- Previous Government contracts
- Product Deficiency Reporting and Evaluation Program documents
- Counterparts in other Federal agencies and state agencies
- Results of Concept Evaluation Programs (Re: DODD 5000.1)
- Program results from Federal research organizations and laboratories, e.g., Jet Propulsion Laboratory, NASA, etc.

The Government has differentiated market investigations from market research and surveys (surveillance) for special attention. Market surveillance is a generalized, continuous, on-going activity, while market investigations are a specific activity undertaken to determine whether products exist that satisfy a specific requirement. It may be thought of as a limited duration activity focused on satisfying a particular requirement and although it may be part of the general activity of market surveys and research, it is quite limited and very specific in nature.

Usually market investigations are associated with nondevelopmental item (NDI) acquisition. The investigation responds to a specific requirement. It provides much of the data project/program managers need to support their acquisition strategy. The investigations include a comprehensive review of design and performance issues such as safety, manpower and personnel integration, reliability, availability and maintainability, and logistics support. One result of a good market investigation should be a well founded basis for deciding whether research and development will be needed to satisfy a particular requirement. Chapter 3 of the NDI handbook (25:3-1) has detailed guidance including product, firm and industry evaluation questions, on conducting market investigations for the DOD to identify NDI which could satisfy program requirements.

2.3 PROS/CONS OF GOVERNMENT ADOPTION OF THE COMMERCIAL APPROACH

Normalizing the practice of conducting market research and analysis as a continuous day-to-day activity of the acquisition function instead of part-time for limited projects and short durations will help DOD ensure the purchase of good value from responsive, responsible suppliers. Market research and surveys will enable DOD to be a knowledgeable, world-class customer, a cornerstone of its Total Quality Management initiatives. They will also help bring more realism into the process of forecasting the success of developing and acquiring

products and systems based on a current assessment of marketplace conditions and capabilities, as well as enabling more realistic cost projections based on marketplace conditions. They will assist in evaluating offers from suppliers and enable practical appraisals of supplier capabilities and potential based on past marketplace performance. They will also enable better specifying of requirements in solicitation documents to promote the broadest possible competition to realize best values. These benefits may require a considerable investment of time and dedicated resources. However, that investment should result in better value per acquisition dollar.

2.4 INHIBITORS TO GOVERNMENT ADOPTION OF THE COMMERCIAL APPROACH

2.4.1 Inhibitors

There are several inhibitors to the commercial practice of using market research and surveys as practiced by non-Government organizations:

Competition Practices (#1)
Specification Practices (#4)
Cost-Based Buy Decisions (#9)
Preference for New Development Versus Nondevelopmental Items (#15)
Inadequate Acquisition Training (#16)

The inhibitors are described in Appendix A.

2.4.2 Inhibitors-Commercial Practice Relationships

2.4.2.1 Competition Practices (#1)

The requirements for the Government to use full and open competition as the preferred procurement process often overshadow or dominate the acquisition processes to the extent that other considerations may be overlooked or ignored. For example, if the full and open competition process will be followed, there may not be sufficient incentive to do market research especially when advertisement and solicitation can elicit responses revealing conditions in the marketplace. Market research could be viewed as unnecessary and as possibly delaying the acquisition. In other words, preoccupation with competition could exclude other considerations such as market surveys, although they could be used to help ensure broader competition by being able to specify requirements in a manner so as not to exclude possible candidates. There could also be protests if there were not full and open discussion and disclosure of the intended use of market acceptability and other criteria evaluated during market research. Effective writing of specifications requires current, accurate knowledge of the marketplace. The real inhibitor is not competition per se, but its practice in the Government.

2.4.2.2 Specification Practices (#4)

The Government's use of detailed specifications often limits the number of potential solutions to a stated need. A number of factors contribute to this situation. One of the most obvious is the relative isolation of the writers of military specifications from users, buyers, and the marketplace. The result is a breakdown in understanding user requirements and what is available in the marketplace. A better understanding of user requirements could mean a broader range of acceptable products, thereby increasing competition with its attendant benefits.

An additional impediment is the Government invocation of how-to-do-it specifications, since few, if any, suppliers will have complied with Government process-type specifications *a priori*, i.e., without a firm Government order prior to manufacture of the item.

2.4.2.3 Cost-Based Buy Decisions (#9)

The Government's tendency to determine a product's fair price by assessing its cost and then adding an arbitrary fixed amount of profit is counter to the idea that free market factors will determine a fair product price. Market research will identify the range of current market prices for a particular product. Any Government attempt to set a price below this range ignores factors such as risk or competition that are embodied in prices set by free markets. Insistence on a cost-plus-profit price instead of a market-determined price discourages commercial vendors from selling to the Government.

2.4.2.4 Preference for New Development versus Nondevelopmental Items (#15)

An example of both a cultural-based and a regulatory-based inhibitor is DOD's propensity to favor (issue) guidance for new development efforts while providing relatively little guidance for procuring existing items. With minimum guidance to Government buyers and a natural inclination to believe one's requirements are unique, the default *modus operandi* is to go for new development rather than take time to determine whether or not something already exists that could satisfy the requirement. Recent legislation (NDI Act of 1989) and the implementing FAR and DFARS will help correct these problems, but education and training of acquisition personnel will be needed to effect permanent change. Having qualified, dedicated people committed to doing market research and analysis as their daily tasks will be a large step forward.

2.4.2.5 Inadequate Acquisition Training (#16)

This is probably the single biggest inhibitor. In late 1990 DOD began sponsoring training for acquisition people in conducting market surveillance and investigations as part of the DOD sponsored NDI course. (See Chapter 9.) However, its focus is on what items are or are not available to satisfy a DOD need, and does not address the full range of issues discussed above, especially those concerning company capabilities and emerging technologies. Acquisition personnel are not usually trained in how to conduct market research, surveys and analyses in the context discussed in this chapter. Acquisition managers at all levels are not sensitive to their benefits and do not require them as a matter of course nor as part of the normal acquisition routine.

2.5 STRATEGY FOR ADOPTING THE COMMERCIAL APPROACH AND COPING WITH THE INHIBITORS

The problem is not one of learning how to do market research and surveys, but applying proven commercial techniques in the Government sector where they have sometimes been perceived as foreign to Government acquisition practices. Efforts to publicize their use in such documents as the NDI handbook are a good start. However, management efforts are also required to legitimize their use in DOD acquisition offices and to use the resulting data as a matter of course in acquisition programs. DOD acquisition personnel should be trained

on how to accomplish market research and surveys. Government practice of market research and surveys should be included in the acquisition education and training curriculums of DOD and the services. DOD acquisition personnel should be assigned and dedicated to the task of doing market research. There should be full time staffs of market research analysts and experts who Government program offices can utilize in the management of their programs. Until then, individual program managers will need to rely on their localized knowledge, their acquisition staffs, and particularly their buyers, to help keep informed about marketplace conditions.

There are no statutory or regulatory provisions against doing market research. Two relatively recent changes make the opposite true. 41 USC 253h requires executive agencies to conduct market research to determine whether NDI are available or could meet agency needs; and FAR 11.003 requires market research, as discussed earlier in this chapter. The resulting experiences and data should be shared between Government acquisition offices and staffs. In a reasonably short time a base of knowledge, both on how-to-do market research and analyses, as well as a data base of the results of market research and surveys can be built and made available to all DOD acquisition personnel.

2.6 RELATED PRACTICES

2.6.1 Best Value

Best value factors should be specific items of interest when conducting market research and surveys. They should also be the objects of the on-going market research and surveys that continue on a daily basis.

2.6.2 Supplier Relationships

Sometimes a buyer will rhetorically ask, "Why bother with market research and surveys if one already has a good supplier base?" and then answer, "Market research may only interfere and jeopardize the existing supplier base." A more accurate answer is that there is a continuous need for understanding the continued viability of existing suppliers on one hand, and the establishment of new suppliers and new products on the other. Good market research and surveys are a means to provide that data. Without such a program, there is the danger of failing to recognize and capitalize on innovative approaches or better values in the marketplace.

2.6.3 Contracting Practices

How one conducts market research and surveys and implements the results is intricately related to the contracting practices employed. Use of volume purchase agreements or similar techniques may be needed to lock in new suppliers, sources, and products with new technologies.

2.6.4 Documentation and Specification Practices

The results of market research are used to further refine a commercial buyer's requirements, so that purchase descriptions can accurately describe the buyer's needs without unintentionally excluding available products that could potentially satisfy those needs.

2.6.5 Inventory Management and Commercial Distribution Systems

Inventory management is one of the factors to evaluate during market research and surveys. Inventory management, including aspects of storage and distribution pertaining to a particular program, should be defined as discussed in Chapter 8.

2.6.6 Nondevelopmental Items

Market research and surveys are critical to fully exploit the potential for savings associated with acquiring non-developmental items instead of developing new ones to satisfy needs.

2.7 REFERENCES AND SOURCES

Bibliography and Reference Numbers: 1, 12, 25, 36, 52, 64, 66, 70

CHAPTER 3

BEST VALUE

INTRODUCTION

Best value is beginning to be recognized by the Government and, in fact, the DOD has published a study that describes a best value evaluation process. (18) Although the practice of best value has already been introduced in the DOD, it is new enough and significant enough to be documented in the results of this study.

Best value means buying on other than a price-only basis, the usual Government practice. The concept is the application of common sense to the buying process, that is, consideration of more than price alone in the buying decision. Quality and reliability were two factors most often mentioned to be considered in addition to price, but there is no universally accepted definition of "best value." This is partially because "best value" is context sensitive, that is, what it means for one purchasing decision may not apply for another decision. Each product is unique, with different circumstances surrounding its acquisition. Therefore, being flexible, being adaptable, and being knowledgeable about what is available in the marketplace are the prerequisites to deciding "best value."

The concept of best value applies to every purchase situation, from complex weapon system acquisition to simple commodity procurement. Even if a formal best value evaluation process is not followed, the underlying concepts of best value are inherent in most purchase decisions. Best value includes price as an evaluation factor, so if all other evaluation criteria are met (i.e., all things being equal) an award to the lowest bidder is an award based on best value.

For example, when purchasing sugar, the Government will issue an invitation for bid (IFB) and will award to the lowest bidder who is responsive to the terms of the

invitation. This may seem to be a situation where award is based simply on price. However, the terms of the IFB are best value evaluation factors. In the sugar example, the IFB could identify requirements for quality, packaging, taste, etc. If these requirements are met, then award to the bidder with the lowest price realizes best value goals.

Another example could be the use of a pre-validated source list or qualified bidders list. An award to the lowest bidder from the list may appear an award based on price only. However, to be approved as a pre-validated source, the bidder had to be favorably evaluated on factors such as past performance, quality of product, and warranty compliance. These are best value evaluation criteria. When all essential evaluation criteria are met, an award to the lowest bidder is an award based on best value.

Best value evaluation also may be used to distinguish between two bids/proposals that differ significantly in price. Bid #1 meets every requirement but at a high price. Bid #2 meets most requirements, including those few determined to be critical or essential, at a much lower price than bid #1. Since price is also a best value evaluation factor, the best value process provides the flexibility to decide in favor of bid #2, though it does not meet all requirements.

With these caveats in mind, for this study "best value" was defined as:

> **the consideration of all factors** relevant to the usefulness and suitability of a product throughout its anticipated life cycle including price **when making an acquisition decision** or distinguishing between multiple purchase sources.

3.1 COMMERCIAL APPROACH

Nongovernment organizations are not as constrained by rigid rules as Government organizations and can more easily employ common sense, an inherent requirement in adopting or using a commercial practice such as best value. For example, buyers for commercial companies use competition to their advantage, getting maximum value at an affordable price. Their objective is not necessarily lowest price or maximum performance, but a balance between often unquantifiable, more subjective "value" criteria such as product quality or reliability, or dependability of schedule or service commitments. Once a buy decision is made in the nongovernment sector, it is usually uncontestable by the losing offerors making best value easier to adopt there than in the Government sector.

3.2 GOVERNMENT APPROACH

The Government has recognized the potential benefits of best value, and has adopted several practices to help achieve it. Most DOD components use factor evaluation techniques routinely as part of a solicitation, and have demonstrated some success in achieving best value. What is needed is a more commercial approach to the best value process. Most factor evaluation techniques used by the Government focus on the technical merit of a proposal and the past performance of the contractor. Commercial companies also use these factors to evaluate potential suppliers, but put greater emphasis on whether the supplier utilizes continuous process improvement concepts. The assumption is that while past performance

can demonstrate a company's previous capability for success, a company that has a good track record *and* utilizes advanced management techniques will be more likely to continue producing improved high quality products in the future.

Examples of DOD consideration of best value processes can be found in several references in the Appendix D bibliography, #18 and #65, as well as by contacting the U.S. Army Communications-Electronics Command about their "Roadmap to a Source Selection."

The following are regulatory references pertaining directly to the Government approach on best value:

(a) FAR Part 14, Sealed Bidding

"An award is made to the responsible bidder whose bid is responsive to the terms of the invitation for bids and is most advantageous to the Government, considering only price and the price-related factors." (14.103-2, Limitations)

"To be considered for award, a bid must comply in all material respects with the invitation for bids. Such compliance enables bidders to stand on an equal footing and maintain the integrity of the sealed bidding system." (14.301, Responsiveness of Bids)

(b) FAR Part 15.605, Evaluation Factors.

"Price or cost to the Government shall be included as an evaluation factor in every source selection. Quality also shall be addressed in every source selection. In evaluation factors, quality may be expressed in terms of technical excellence, management capability, personnel qualifications, prior experience, past performance, and schedule compliance. Any other relevant factors, such as cost realism, may also be included ... While the lowest price or lowest total cost to the Government is properly the deciding factor in many source selections, in certain acquisitions the Government may select the source whose proposal offers the greatest value to the Government in terms of performance and other factors."

(c) DFARS Subpart 7.103(2), Life Cycle Cost Criteria.

"Since the cost of operating and supporting a system or equipment over its useful life is substantial and, in many cases, greater than the acquisition cost, it is essential that such costs be considered in development and acquisition decisions in order that proper consideration can be given to those systems or equipments that will result in the lowest life cycle cost to the Government."

(d) DFARS Subpart 9.104-3, Responsible Prospective Contractors.

"Quality is a significant consideration in determining satisfactory performance. DOD components shall assure that contracts are not awarded to contractors with a history of providing supplies or services of an unsatisfactory quality."

(e) DFARS Subpart 15.613(b)(4), Source Selection

"The selection will be based on an integrated decision, involving consideration of technical approach,

capability, management, design to cost, operating and support cost objectives, historical performance, price/cost and other factors."

3.3 PROS/CONS OF GOVERNMENT ADOPTION OF THE COMMERCIAL APPROACH

While best value evaluation may prove cost effective in the long run, there are some up-front costs that should be considered. A product procured through the best value process may not have the lowest initial price of all comparable products available. Efforts to prevalidate sources or to provide special consideration for suppliers who have previously demonstrated dependability and quality require a higher degree of administrative skills and will take more time. The evaluation process itself will require more time and manpower than a simple closed bid evaluation whose sole criterion is price. The payback of utilizing a best value evaluation process is realized over the long term--in better design, increased ease of use, higher reliability, lower maintenance and repair costs, and higher product quality.

3.4 INHIBITORS TO GOVERNMENT ADOPTION OF THE COMMERCIAL APPROACH

3.4.1 Inhibitors

There are several inhibitors to the commercial practice of best value:

Competition Practices (#1)
Formality of the Government Acquisition Process (#2)
Specification Practices (#4)
Paperwork Requirements (#5)
Data Rights (#6)
Warranties (#13)

The inhibitors are described in Appendix A.

3.4.2 Inhibitors-Commercial Practice Relationships

3.4.2.1 Competition Practices (#1)

Commercial buyers consider the past performance of suppliers as a critical factor in determining best value. Quality of past performance and consistent delivery of best value products often result in the establishment of long-term supplier relationships with the vendor. CICA requirements for full and open competition may be considered an obstacle to the Government's ability to establish and maintain commercial-like relationships since most contract awards are competed individually with no commitments for future follow-on business. However, past performance, e.g., quality and delivery, can be evaluation factors in subsequent acquisitions to distinguish between vendors. Initiatives for recording and making available contractor past performance during the source selection process are beginning to counteract some of the effects of competition on best value.

3.4.2.2 Formality of the Government Acquisition Process (#2)

The Government is prohibited from withholding future work from an uncooperative vendor if the vendor continues to meet the legal requirements of the contract ("work to the rule" attitude). This inhibits the Government's ability to use subjective past performance criteria such as a willingness to cooperate to resolve

ambiguities that might be in compliance with contractually required processes, but will result in items or performance that is unsatisfactory in satisfying real needs of the Government.

3.4.2.3 Specification Practices (#4)

The Government's tendency to specify how a product is to be made, via detailed "how-to" (process) specifications, inhibits its ability to procure the best value commercial product. Products that meet all Government requirements, providing essential form, fit, and function compatibility, but were not produced according to Government process specifications are eliminated from consideration. Best value considerations should focus on the specific characteristics and capabilities of a product, not the process to be followed in the product's manufacture and production.

3.4.2.4 Paperwork Requirements (#5)

The volume of paperwork required of commercial vendors doing business with the Government (i.e., reporting and record keeping requirements) discourages many vendors from submitting bids. Requirements for Commercial Pricing Certifications limit the Government's selection of suppliers to those willing to do the required paperwork, not necessarily those with the best product. This certification also inhibits the Government's acquisition of low-volume, high-value state-of-the-art products. The many other certifications required of vendors, such as, Byrd Amendment, Truth in Negotiation Act, socio-economic clause compliance, etc., and the corresponding reporting and record retention requirements also keep potential suppliers from submitting bids, further frustrating the Government's ability to acquire the best value product.

3.4.2.5 Data Rights (#6)

Although Government policy is to acquire only what data is needed, they are usually more than the commercial practice. When the Government acquires state-of-the-art products, it often also acquires all data necessary to allow competitive reprocurement of the item. Since this data are considered highly valuable and proprietary by most suppliers, many refuse Government business on this basis alone. The Government then must find an alternative source for the product, pay for another supplier to develop the product, or settle for a product that is not state-of-the-art. Insistence on acquiring full data rights clearly inhibits the ability to acquire best value products.

3.4.2.6 Warranties (#13)

The FAR and DFARS warranty clauses limit the Government's ability to take advantage of commercial warranties associated with commercial products. An acceptable product with a good commercial warranty may be overlooked in favor of an inferior product that has a warranty meeting the FAR/DFARS requirements. In addition, it costs a commercial vendor more if their standard warranty is not used and they have to administer multiple warranties for the same product. These additional costs are paid by the Government, resulting in higher product cost.

3.5 STRATEGY FOR ADOPTING THE COMMERCIAL APPROACH AND COPING WITH THE INHIBITORS

A Best Value Evaluation Process (BVEP) based on a factor evaluation tailored to the specific product requirements should be outlined in the solicitation. This requires that, before the solicitation, a decision be made on what criteria and ranking scale will be used to determine which contractor's proposal represents best value. Good market research will help provide the answers to what represents best value for a given acquisition. Including the factors or criteria in the solicitation also informs potential contractors of the evaluation process to be used, allows them to address all evaluation factors, and ensures a fair basis for competition and proposal evaluation.

Conducting source prevalidation is another technique that can be used with a best value evaluation process. DOD component programs such as Blue Ribbon, Blue Chip Vendor, and Quality Vendor attempt to assure the quality of material acquired by DOD by using information regarding past performance in qualifying contractors for special consideration. (18:5) Contractor performance is validated or certified based on factors such as quality and on-time delivery. Contractor capability assessment is the responsibility of the servicing contract administration organization. While an initial investment of resources is required to conduct the surveys, the impact on contract administration will be favorable over the long term. As more contractors participate in the programs, more known contractors will submit offers, requiring fewer inquiries and surveys; and, with prevalidation, contract cost and schedule risk should be lower, resulting in lower contract administration costs. However, if a low bidder has not been pre-validated by past performance, an assessment of the low bidder's capabilities should be conducted to ensure that the Government acquires the best value product.

Use of a best value evaluation process and prevalidating suppliers can help overcome some of the problems associated with uncooperative and nonperforming suppliers while still meeting the full and open competition mandates of CICA. Documented use also will provide evidence of a fair selection decision in the event of protests from unsuccessful bidders. In addition, the following guidelines should be considered for adoption to further ensure acquiring the best value product:

(a) Use functional specifications or generic product descriptions rather than detailed process specifications so commercial products meeting the Government's requirements are not excluded from competition because of the process used in their manufacture.

(b) Require only those certifications mandated by public law.

(c) Reduce paperwork requirements to the minimum on a case-by-case basis. Require the contracting officer justify the essentiality of each paperwork requirement rather than justifying its elimination.

(d) Minimize the requirement to submit proprietary data with proposals.

(e) Rely to the largest extent possible on the commercial warranty normally offered with the product. The comprehensiveness

and suitability of the warranty should be one of the factors evaluated during the best value evaluation process.

To realize the full benefits of including warranties as a best value factor, the administration of the warranty should be the responsibility of the organization in the DOD responsible for service and support of the item.

The following is a set of factors in the form of questions whose answers should be considered in a BVEP. The Program Manager should determine for each solicitation, which factors are critical to the success of the program and how they should be weighted, and use the results to determine best value criteria.

3.5.1 Technical Factors

The technical characteristics of a required product or service are usually determined by the user before generation of the solicitation. The criteria used to evaluate offers for an item should be the same as those used to develop specifications.

3.5.1.1 Technical Suitability of the Product (for NDI--not new development)

(a) Is the product technically adequate? Does it meet the basic form, fit, and function requirements?

(b) Are the product's materials and construction suitable for its intended use, or can it be modified?

(c) Is it necessary for the product to be integrated into an existing system and is it capable of this integration without degrading the primary system?

(d) Is product design and technology expected to remain relatively stable over the life expectancy of the primary system?

(e) Is the product the latest state-of-the-art or otherwise technically superior to others on the market?

(f) Does the product, or in its absence, product family, history show normal failure rate, breakage, and deterioration?

(g) Does the product have a good reputation and market acceptability in a competitive market?

3.5.1.2 Contractor Technical Approach

(a) Does the contractor have the capability to produce the product?

(b) Is the product manufactured using state-of-the-art materials and industrial techniques?

(c) Is the product manufactured to existing industrial standards and can the contractor demonstrate compliance?

(d) Are industry standard specifications sufficient, or does the product need to conform to pertinent Government or military specifications?

(e) Does the contractor demonstrate the ability to provide ongoing support, and the willingness to adhere to warranty obligations and to cooperate in problem resolution?

3.5.2 Management Factors

In many acquisitions, vendor past performance is important. Sometimes a

manufacturer's reputation in the market place is all that is required to ensure responsibility. However, the demonstrated application of continuous improvement management principles provides confidence that future performance will also be sound. A contractor with a history of nonperformance should be avoided.

3.5.2.1 Management Approach

(a) Is the contractor experienced and competent in producing the product at the proposed price?

(b) Does the contractor management plan outline a sufficient dedication of resources; application of quality management principles; and the required level of service and support after sale, schedule, and delivery projections?

(c) Does the contractor have qualified personnel with the requisite expertise?

3.5.2.2 Past Performance

(a) Has the contractor produced and delivered the product before?

(b) Does the contractor have a proven ability to meet schedules and a satisfactory record of performance?

(c) Does the contractor have a favorable reputation, a customer orientation, and a proven history of meeting long-term commitments?

(d) Is the contractor's record free from instances of overpricing, post-award cancellations, unauthorized substitutions of materials, and requests for price increases or waivers?

3.5.3 Quality Factors

The cost of dealing with faulty products and contract performance problems can be high. Evidence of production quality programs such as statistical process control indicate continuing improvement of quality and good risk management.

3.5.3.1 Quality Assurance

(a) Is the contractor quality assurance plan designed to provide products at least comparable in quality to competing products, a continuing cycle of improvement, and incorporation of pertinent commercial standards?

(b) Does the quality inspection plan match the quality assurance plan and employ statistical process control or state-of-the-art inspection techniques?

(c) Is the inspection system adequate to provide the required level of quality without substantially increasing the product cost?

(d) Are contractor and Government inspection responsibilities clearly defined?

3.5.3.2 Past Performance

(a) Does the vendor have a substantiated history of meeting technical and quality requirements, and a proven record of cooperation and acceptance of responsibility in quality problem resolution?

(b) Is a system in place to track materials availability and quality?

(c) Is the rate of test failure for incoming material acceptable?

(d) Is the failure rate of fielded products as low as expected by the Government and normal to the industry?

3.5.4 Logistics Factors

Often the products identified in a solicitation must be integrated into an already established complex logistics system. The greater the degree of compatibility between the existing products and those offered in response to a new solicitation, the lower the cost and impact of integration.

(a) Is the integrated logistics support plan comprehensive enough to identify any difference in cost and other resources among offers?

(b) Should the degree of compatibility with existing logistics systems be considered?

(c) Is there more than one source for repair/support?

(d) Are commercial operating, maintenance and training manuals available and adequate?

(e) Is the establishment of an organic maintenance capability required? If not, can the contractor provide the required support?

(f) Is the commercial warranty offered workable in the use profile of the product?

(g) Does the contractor have a history of honoring warranty agreements and cooperating in problem resolution?

3.5.5 Industrial Base Factors

Maintenance of strategic industrial surge capability and the establishment of a broader competitive base influence buying decisions and, to some extent, result in higher initial cost.

(a) Is mobilization a factor for this product?

(b) What is the emergency response capability for the industry segment?

(c) Is there a need to maintain or establish a competitive base for the product or like items used by the Government?

3.5.6 Cost Factors

Best value decisions are based on the overall or long term worth to the Government.

(a) What elements or factors are included in the proposed contract price and what is not addressed?

(b) What is the expected total product life cycle cost (e.g., operating, training, and maintenance)?

3.6 RELATED PRACTICES

3.6.1 Market Research and Surveys

Commercial companies conduct extensive market research to examine potential sources of a product, to evaluate the supplier's (and the product's) reputation in the marketplace, and to assess the market price ranges for the product. This information helps to determine factors to be used in best value

evaluation, and to pre-validate best value sources of supply.

3.6.2 Supplier Relationships

Commercial companies can limit competition to those vendors it considers cooperative and reliable and suppliers of high quality products--all of which are characteristics used in determining best value.

3.6.3 Contracting Practices

Best value evaluation allows factors such as quality and past performance to receive higher consideration than price when making solicitation decisions and, therefore, the contracting practices followed have a direct bearing on the evaluation's success. However, best value considerations must be more specific in Government than in commercial solicitations. They also need to receive more formal attention during Government contract administration than during commercial contract administration to satisfy Government compliance checking requirements, that is, the perceived need to verify that each specified requirement has been met or been complied with. Since the practices of best value are intricately interwoven with contracting practices, they need to be considered together.

3.6.4 Warranties

Commercial companies view product warranties as an integral factor in projecting a product's potential life cycle cost, and therefore in determining best value.

3.6.5 Inventory Management and Commercial Distribution Systems

A supplier's inventory management and commercial distribution system should be evaluated for compatibility with the Government's logistics support needs. If appropriate to the particular acquisition, it should be included as a factor in the BVEP.

3.7 REFERENCES AND SOURCES

Bibliography Reference Numbers: 18, 64, 65

CHAPTER 4

SUPPLIER RELATIONSHIPS

4.1 COMMERCIAL APPROACH

Maintaining good supplier relationships is an important practice in the commercial sector. Commercial buyers seek out suppliers of high-quality, low-priced products, and then stay with them as long as the relationship remains mutually beneficial. Commercial businesses avoid suppliers with inconsistent or unsatisfactory records of performance and delivery. They do, however, consider a new supplier if there is potential for a better quality or lower priced product, and if the new supplier is evaluated successfully in terms of stability and quality management practices.

Long term relationships with specific suppliers can yield "preferred customer" (lower) prices. Limiting competition to a few well known suppliers can also help ensure product quality and on-time delivery. A number of large companies have major ongoing initiatives to reduce their supplier base as a measure for increasing the quality of their products. A supplier's past history of successful product innovation and improvement enables buyers to take advantage of their product improvements with lower associated risk.

At the far extreme of the spectrum of one company committing itself to another is a practice not found in the Government, cooperative supplier relationships. This is the practice of a customer funding the start-up costs for a suppler to develop a new product in order to ensure a reliable source of supply. A business may sometimes work with a supplier to develop it as a new source for a product, thereby establishing a long term relationship of benefit to both parties. The buyer will have a stable, dependable, high quality, available-when-needed source of supply; and the seller will have a dependable customer enabling it to survive

through unfavorable business cycles. These relationships also permit work to continue to the advantage of both parties during dispute and protest resolution. Good suppliers invest a lot of time and effort assessing their customer's needs and adapting their products to those needs. Communication and cooperation between buyer and supplier are essential for both to succeed, thereby fostering good relationships.

This guidebook assumes there is competition in the marketplace among potential suppliers so there would be incentives for suppliers to have dependable markets for their products. Price, as well as quality and/or service, could be the basis for the buyer side of supplier relationships. However, in the absence of adequate competition among suppliers, the motivation for a supplier to maintain good relationships with customers may sometimes be due more from the threat of potential new competitors than from existing ones. When inordinate demand far exceeds supply for a reasonably long period, long term supplier relationships will probably be as scarce as the product or commodity in question.

4.2 GOVERNMENT APPROACH

Supplier relationships are a method to reduce risk for both parties, a dependable, reliable source of supply in exchange for a dependable, reliable sales volume. Unlike commercial firms, the Government cannot make the commitments necessary to establish and maintain long-term supplier relationships that is, it cannot guarantee a long term relationship and cannot usually accept standard commercial terms and conditions. Because of legislative and regulatory inhibitors, the Government is restricted in its ability to establish supplier relationships beyond the boundaries of a specific contract.

Some Government practices are intended to increase competition by ensuring fairness and equal opportunity, but they can also act as inhibitors to establishing and maintaining good supplier relationships. Government attempts to have both competition and a semblance of longer supplier relationships through mechanisms such as multiyear contracting and multiple award schedules have not been very beneficial to the suppliers. Two reasons for this are the Government's unilateral right to terminate an acquisition for convenience, albeit with compensation to the seller; and the absence of a guaranteed minimum sales volume for Multiple Award Schedule contracts, although the negotiated prices are the "best" available. Each contract award is made independently. The result is that the Government is perceived as having little loyalty to suppliers and little interest in their long term stability and strength. The Government approach to supplier relationships is generally a negative one, discouraging potential vendors from engaging in business with the Government.

4.3 PROS/CONS OF GOVERNMENT ADOPTION OF THE COMMERCIAL APPROACH

Adoption of practices to improve supplier relationships will benefit the Government in the same ways it benefits commercial businesses, by having a known source for high quality, competitively priced products with little associated risk. However, the benefits of establishing good supplier relationships must be balanced with requirements for competition and the

maintenance of a broad industrial base of capable suppliers. Another complication in adapting the commercial approach is the perception that supplier relationships are inconsistent with the tenet that Government-contractor relationships need to be "at-arm's-length." Convincing those in authority that good supplier relationships and an "at-arm's-length" posture are compatible may be difficult.

4.4 INHIBITORS TO GOVERNMENT ADOPTION OF THE COMMERCIAL APPROACH

4.4.1 Inhibitors

There are several inhibitors to the Government's ability to establish and maintain supplier relationships:

Competition Practices (#1)
Formality of the Government Acquisition Process (#2)
Data Rights (#6)
Favored Customer Status (#8)
Protest System/Process (#10)
Delays in Prompt Payment (#14)
Preference for New Development Versus Nondevelopmental Items (#15)
Inadequate Acquisition Training (#16)

The inhibitors are described in Appendix A.

4.4.2 Inhibitors-Commercial Practice Relationships

4.4.2.1 Competition Practices (#1)

Commercial buyers consider the past performance of suppliers as a critical factor in determining best value. Quality of past performance and consistent delivery of best value products often result in the establishment of long-term supplier relationships with the vendor. However, the CICA requirements for full and open competition are an obstacle to the Government's ability to establish and maintain such relationships since contract awards are competed individually with no commitments for future follow-on business. The Government is denied the use of informal vendor control methods such as boycotting or placing a larger portion of its business with more cooperative suppliers.

4.4.2.2 Formality of the Government Acquisition Process (#2)

The Government relies almost exclusively on formal contracting structures, using objective decision criteria for quality, testing, and acceptance standards and a relatively severe attitude toward enforcement. This tends to promote an adversarial relationship based on literal contract enforcement and a "work to the rule" attitude on the part of the supplier, rather than a relationship based on cooperation and teamwork, essential ingredients to building and maintaining good, long term supplier relationships.

4.4.2.3 Data Rights (#6)

When the Government acquires state-of-the-art products, it usually also acquires voluminous amounts of data (manuals, drawings, etc.) with data rights which would permit the Government to generally do what it wants with that data. It may use the data to competitively reprocure the product. Even when restrictions are placed on use of the data, it has not been unusual to find inadvertent release of sensitive data to the

general public. Suppliers of these items are often justifiably wary of providing what they consider proprietary data for fear that Government distribution and use of it may result in a loss of market share. Some commercial suppliers of state-of-the-art products refuse to sell more than use/operations-type data with their products, forcing the Government to pay another supplier to develop the technology or buy older, less competitive technology. More moderate Government demands for technical data rights from high-tech suppliers and more protection of supplier technical rights in purchase agreements would be beneficial to both suppliers and the Government.

4.4.2.4 Favored Customer Status (#8)

The Government expects to be treated as a "most favored customer" without recognizing that these relationships are partnerships where the "most favored" status is in exchange for some benefit or consideration. The problem for the Government is that, unlike commercial firms, it cannot make the commitments necessary to establish and maintain long-term supplier relationships. This unfair requirement keeps qualified suppliers from wanting to do business with the Government, and is detrimental to the Government in the long run by inhibiting cooperative supplier relationships.

4.4.2.5 Protest System/Process (#10)

Most vendors need to maintain a relatively stable work load that is predicated on a predictable business volume. The potential for delay in Government contract award due to protests is sometimes so unpredictable and unmanageable that some vendors would rather forego Government business than suffer erratic oscillations in their business operations. Government attempts to avoid protests inhibit it's ability to make contract awards to potentially higher-quality, but higher-priced suppliers. They also encourage spreading contracts among suppliers rather than staying with a known and reliable supplier. Both practices are counterproductive to establishing and maintaining good supplier relationships.

4.4.2.6 Delays in Prompt Payment (#14)

When the late payment customer is also the one demanding the best price (lowest profit margin) it is easy to see why many firms prefer not to seek Government business. They would rather establish supplier relationships with customers who remit promptly and who are less inclined to resort to litigation to resolve disputes than is the Government.

4.4.2.7 Preference for New Development Versus Nondevelopmental Items (#15)

The majority of the DOD acquisition business is developing and acquiring major weapons systems and subsystems that push the state-of-the-art. Consequently, it has developed working relationships with development contractors and laboratories and has not pursued relationships with commercial product suppliers to the same extent as it has with developers. The result is that unless the program manager and/or buyer makes a specific effort to cultivate supplier relationships, it would take significant effort for a supplier to overcome this and the other inhibitors to building and maintaining effective supplier relationships.

4.4.2.8 Inadequate Acquisition Training (#16)

Given the general perception and attitudes discussed above, it is not surprising that Government procurement and contracting personnel have not been trained in the issues involved in establishing and maintaining good supplier relationships. The result is that the supplier must have overwhelming proof that such relationships are really in the best interest of the Government. Absent adequate acquisition education and training for at least program management and contracting personnel and their superiors, little progress can be realized in adopting this commercial practice.

4.5 STRATEGY FOR ADOPTING THE COMMERCIAL APPROACH AND COPING WITH THE INHIBITORS

There is no existing law or regulation specifically prohibiting the Government from awarding multiple contracts to a consistently reliable, high-quality supplier. The use of a best value evaluation process during solicitation allows the Government to stress quality and past performance, among other factors, in choosing between suppliers. Uncooperative and nonperforming vendors can be eliminated from consideration without compromising full and open competition. Over the long run, if consistently applied, best value evaluation should result in the same suppliers receiving awards if they continue to produce high quality, competitively priced products. This will enable the Government to begin establishing some form of long-term supplier relationships and to reap the benefits associated with them. In addition, an equitable and consistent application of a best value evaluation process will provide the Government a fair basis for selection, and will serve as evidence of fairness to unsuccessful bidders and protestors. The Government should strictly enforce the CICA requirement that "frivolous" protests be immediately rejected and not be allowed to delay an award. When an individual contracting officer or program manager is convinced of the merits of establishing and maintaining effective supplier relationships, that individual's superiors will probably also need to be convinced in order to get the necessary approvals for implementation.

Consideration of some of the following may provide a genesis for building and maintaining supplier relationships:

(a) Use performance specifications or product descriptions in solicitations rather than process specifications whenever possible.

(b) Eliminate formal in-process inspections that foster a work-to-the-rule attitude on the part of the supplier.

(c) Strive for a cooperative relationship based on teamwork instead of an adversarial relationship.

(d) Recognize that acquiring proprietary data could potentially jeopardize a commercial supplier's position in the marketplace. Acquire only the data normally provided with the product unless there is a compelling operational reason to the contrary.

(e) Recognize that "most favored customer" prices are usually accompanied by reciprocal standard commercial practice commitments, terms, and conditions, such

as those a supplier normally requires of a commercial business seeking "most favored customer" status. Be willing to negotiate equitable terms that protect both supplier's and buyer's rights.

(f) Recognize that prompt payment is usually expected in return for preferred treatment from the supplier. Make a concerted effort to ensure that the "system" provides payments within a time frame similar to commercial practice.

(g) If a commercial item is available that meets the needs, make every effort to acquire that item rather than pay for development by another supplier.

4.6 RELATED PRACTICES

4.6.1 Market Research and Surveys

Commercial firms conduct extensive market research to examine potential sources of a product, to evaluate the supplier's (and the product's) reputation in the marketplace, and to assess the market price ranges for a product. Suppliers are motivated to maintain good reputations in the commercial marketplace by offering products which will satisfy their customers. Communication and cooperation between buyers and sellers is essential for an efficient operating market. Conducting market research will alert potential suppliers of buyers needs and help foster competition and relationships with "best value" suppliers.

4.6.2 Best Value

One of the primary factors used in best value evaluation is quality of past performance. Consistent use of best value evaluation will eventually lead to the majority of contract awards going to well-known, quality suppliers.

4.6.3 Contracting Practices

Commercial businesses use contracting practices, such as volume purchase agreements with a price break given for a high volume order, to establish long-term, mutually beneficial relationships with their suppliers.

4.6.4 Warranties

Administration of warranties is another factor used to evaluate the competence of a supplier. Responsive suppliers providing comprehensive support over the lifetime of their products are pursued as potential long-term suppliers.

4.6.5 Inventory Management and Commercial Distribution Systems

Suppliers who can effectively manage inventory levels and provide "just in time" delivery of products are preferred by commercial businesses.

4.6.6 Nondevelopmental Items (NDI)

Commercial firms often turn to their existing supplier base for availability of NDI to satisfy new requirements. If the solution is not an NDI per se, but a modified NDI or perhaps a new development item, existing suppliers would be a preferred source since they represent proven, reliable performance.

4.7 REFERENCES AND SOURCES

Bibliography and Reference Numbers: 51, 52

CHAPTER 5

CONTRACTING PRACTICES

5.1 COMMERCIAL APPROACH

Commercial firms usually rely on the Uniform Commercial Code (UCC) as a regulatory guideline for general requirements on the standard conduct of business, and on standard, marketwide contracting practices. As a result, contracts for the purchase of items are usually simple and concise, addressing only the specific requirements of the particular acquisition.

Commercial firms use standard form contracts, standard purchase agreements, and volume purchase agreements. Standard form contracts allow a consistent process to be followed for purchasing similar items. Standard purchase agreements with suppliers allow reordering of stock items at stated price levels without having to renegotiate a contract for each order. With a volume purchase agreement, a supplier agrees to give a discount on the normal per-unit price when the buyer agrees to order a large quantity of the product. These practices enable streamlining of the contracting process saving time and reducing costs.

Commercial firms also rely to a large extent on standard business practices. In acquisition the foremost prerequisite is that the product satisfy the buyer's requirements, such as form, fit, and function. The commercial buyer does not try to control a supplier's manufacturing, packaging, or quality assurance processes. The UCC provides a common, industry-wide reference for these processes which help facilitate a mutual understanding between the contracting parties.

5.2 GOVERNMENT APPROACH

Government contracting practices are often significantly different from commercial contracting practices. In place of the UCC,

Government contracting practices are governed by an extensive body of law and thousands of pages of regulations (FAR, DFARS, etc.). It is beyond the scope of this guidebook to summarize that overwhelming body of rules and practices. However, the Government approach can be characterized as being more rigid, more procedure oriented, more detailed, and more complex than the commercial counterparts. (Please note the discussion of Government contracting practices as inhibitors in Appendix A.)

When the Government acquires an item from a commercial supplier, the contract usually developed is enormously detailed and complex compared to commercial contracts for similar items. The Government attempts to protect itself from all conceivable contingencies through the incorporation of multitudinous and voluminous contract clauses. These clauses, which are used to ensure that the Government receives a quality product at a fair price, are often in direct conflict with standard commercial practices and the UCC. The added cost to the commercial supplier for complying with these clauses is passed on to the Government, with the Government paying more than a commercial firm would for practically the same product.

An example of a Government attempt at standard purchase agreements is the GSA-administered Multiple Award Schedule (MAS). The MAS is an attempt to provide all Federal agencies with a source of supply for common stock items. However, the administration of the MAS and the requirements for inclusion on it, such as submission of cost or pricing data, and preferred customer rates, are uncommercial-like and inhibit suppliers from participating.

The Government and DOD have been more successful in being commercial-like in their small purchase contracts, currently with a threshold of $25,000. Administration of these follow a significantly simplified purchasing process, such as permitting the use of telephone quotes and not requiring *Commerce Business Daily* (CBD) announcements.

5.3 PROS/CONS OF GOVERNMENT ADOPTION OF THE COMMERCIAL APPROACH

The DOD cannot simply substitute the UCC for the FAR and DFARS. For example, the UCC is mute on competition and source selection, two very important ingredients in the Government acquisition process. But, DOD buyers are being permitted greater latitude on what requirements are invoked on DOD contracts and, through legislation like 10 USC 2325, Preference for Non-Developmental Items, are being permitted to be more commercial-like in some contracting practices. A prominent example of the changes currently being undertaken is the rewrite of DFARS 211, Acquisition and Distribution of Commercial Products to include a new subpart on contracting for commercial items. (See Appendix D for an analysis of this new subpart.)

Using commercial contracting practices will enable the DOD to purchase products faster and for lower costs because it will reduce contractor costs of doing business. A standard form contract could be used to procure a majority of nondevelopmental items, saving solicitation preparation and proposal evaluation time. Expanded use of standard purchase agreements and volume purchase agreements will facilitate lower per-unit rates. Generic product descriptions

or functional specifications will eliminate the need for in-process quality and manufacturing inspections, saving both time and money while reducing onerous paperwork attendant with DOD quality inspections.

5.4 INHIBITORS TO GOVERNMENT ADOPTION OF THE COMMERCIAL APPROACH

5.4.1 Inhibitors

There are several inhibitors to adopting commercial contracting practices:

- Formality of the Government Acquisition Process (#2)
- Contract Clauses (#3)
- Specification Practices (#4)
- Data Deliverables (#7)
- Favored Customer Status (#8)
- Cost-Based Buy Decisions (#9)
- Protest System/Process (#10)
- Quality Assurance, Quality Control, and Inspections (#12)
- Warranties (#13)
- Inadequate Acquisition Training (#16)

The inhibitors are described in Appendix A.

5.4.2 Inhibitors-Commercial Practice Relationships

5.4.2.1 Formality of the Government Acquisition Process (#2)

In order to promote and realize fairness and equal opportunity in the Government contracting process, the Government relies on very specific rules, regulations, and procedures in order to eliminate subjective bias in the expenditure of public funds. Formal rules are also necessary due to the numbers of personnel involved in Government contracting and their turnover rate. This environment and the resulting practices are in direct contrast to an attitude of cooperative contractual arrangements between buyers and sellers in the commercial sector. One manifestation of this atmosphere is that commercial firms usually try to avoid litigation due to the costs and delays associated with legal proceedings. The reality is that the Government's need for a rigid, formal contracting process effectively works against the adoption of more commercial-like contracting practices.

5.4.2.2 Contract Clauses (#3)

There is a large number of potential clauses the Government can include on contracts. This inhibits the creation and use of a standard form contract. While there are only a relatively small number of clauses that by law must be included on all contracts, it is standard practice for contracting officers to include many other clauses to ensure the Government's rights are protected.

5.4.2.3 Specification Practices (#4)

The Government's tendency to rely on detailed, contract-unique process specifications rather than commercial-like product descriptions restricts the ability of potential contractors to satisfy Government requirements.

5.4.2.4 Data Deliverables (#7)

The Government generally requires more documentation, such as user and maintenance manuals and schematic drawing packages, than is normally produced with

commercial products. Generating these documents is usually a distraction for the supplier, since people are diverted from their usual work activities to develop them. Additionally, they are reluctant to provide detailed technical data about their products for fear of potentially revealing competitively advantageous information. Unless a firm is in business to produce technical documents, requesting them in addition to what is normally provided with a product in different form or format discourages vendors from selling their products to the Government.

5.4.2.5 Favored Customer Status (#8)

When the Government negotiates standard or volume purchase agreements, such as on the GSA Multiple Award Schedule contracts, the Government requires that the supplier sell the product at the lowest price offered to any other customer. Most commercial suppliers reserve their lowest prices for their oldest and highest volume, i.e. "most favored", customers. The Government demands most favored customer prices, but does not engage in the long-term relationships which raise supplier expectations of future, follow-on orders, or other commercial practices that provide the foundation for most favored customer status. Unreasonable Government insistence on the "best price" discourages commercial suppliers from doing business with the Government.

5.4.2.6 Cost-Based Buy Decisions (#9)

The Truth in Negotiations Act (10 USC 2306a) requires contractors to submit cost or pricing data for any Government contract over $500,000. There is no commercial counterpart to this requirement. In the commercial sector, the buying decision is focused on price. Negotiations are done on the basis of price, not cost. The seller does not provide the buyer access to an item's cost data, and in fact may treat this data as restricted or proprietary information. The Government's insistence on the submission of cost data not only discourages vendors from selling to the Government, but also inhibits it from becoming more commercial-like in its contracting practices.

5.4.2.7 Protest System/Process (#10)

Commercial contracting places greater reliance on the judgement of those administering the contract award process than does Government contracting. If the Government were to adopt more commercial-like contracting practices, there would be an implicit recognition that the exercise of judgement rather than formal rules would become more important. By itself, this may be an admirable change, however, the exercise of judgement could invite more protests of contract award decisions. In the commercial sector there is no inherent right for losing-bid suppliers to protest contract awards. This is a situation where the unique nature of the Government is an inhibitor to completely adopting a commercial practice.

5.4.2.8 Quality Assurance, Quality Control, and Inspections (#12)

The Government often contractually requires compliance with certain manufacturing processes or procedures with the intent of ensuring a quality result. Instead of building in quality, the result is an "inspect-in quality" approach which has almost universally failed in improving the quality of delivered products. One reason for failure

is the perceived abdication of the quality responsibility from the builders to the inspectors. The commercial approach would be to first rely on the supplier's own quality assurance process, whose ultimate test of effectiveness is buyer product acceptance in competitive marketplaces; and to inspect only the finished product for acceptability. Suppliers constantly strive to maintain a reputation for product quality to remain competitive in the commercial marketplace, therefore "inspecting-in" quality is redundant and adds to product cost with no corresponding benefit to the Government.

5.4.2.9 Warranties (#13)

The commercial practice is to adopt the offered commercial warranty as-is, and resort to the UCC to help resolve ambiguities. There are FAR and DFARS warranty clauses normally included in Government acquisition contracts. The Government warranties are usually different from the commercial warranty normally offered with the product, although not necessarily more comprehensive. A supplier would incur additional costs, as well as disruptions in normal operations, in administering multiple warranties on the same product. These costs could either be passed on to the Government, or the supplier could decline to accept the Government business. Being flexible on warranties by seriously considering adoption of the usual commercial warranty would significantly diminish this inhibitor and facilitate a more commercial-like approach.

5.4.2.10 Inadequate Acquisition Training (#16)

DOD contracting officers have not been well trained in the acquisition of nondevelopmental items, and are not sensitive to the unique requirements and potential for streamlining when acquiring NDI. There are vast differences between the contracting practices necessary to acquire a DOD-unique, newly developed item, and those used to acquire a commercially available item. Most of the problems caused by the inhibitors listed above could be mitigated if contracting officers were provided specialized training and support to enable them to efficiently acquire items with simplified and tailored contracting practices.

5.5 STRATEGY FOR ADOPTING THE COMMERCIAL APPROACH AND COPING WITH THE INHIBITORS

The assumption is that it will be easier to first adopt commercial contracting practices in the acquisition of commercially available items than in the acquisition of newly developed ones. The majority of the inhibitors to DOD adoption of commercial contracting practices are procedural practices rather than statutory prohibitions. Government acquisition managers today need to recognize that when acquiring commercially available items it is necessary to tailor and modify the process used to acquire DOD-unique, newly designed items. Contracting officers need flexibility and management support to adapt commercial practices to acquiring items. Final completion and implementation of a standard form contract will simplify the problem. It is being developed in light of existing commercial standard form contracts with those modifications necessary to accommodate the peculiar needs of the Government and to comply with public law. (See Appendix D.)

Government acquisition personnel should consider the following guidelines when acquiring commercially available products. The guiding principal is to keep the solicitation as simple as possible while continuing to meet needs and to comply with the law:

(a) Use only functional specifications or generic product descriptions in the solicitation.

(b) Include only those contract clauses specifically required by law.

(c) Rely on the supplier's internal quality assurance system and inspect the product for contract compliance only at delivery.

(d) Request only those documents normally provided with the product.

(e) Accept the warranty normally offered with the product.

5.6 RELATED PRACTICES

5.6.1 Market Research and Surveys

How one conducts market research and surveys and implements the results is intimately related to the contracting practices employed. Use of volume purchase agreements or similar techniques may be needed to lock in new suppliers, sources, and products with new technologies.

5.6.2 Best Value

Best value evaluation allows factors such as quality and past performance to receive higher consideration than price when making solicitation decisions, and therefore the contracting practices followed have a direct bearing on the evaluation's success. This process is fully compliant with CICA requirements and can be used by the Government to legally enter into volume purchase agreements or standard purchase agreements. However, best value considerations must be more specific in Government solicitations than in commercial solicitations. They also need to receive more formal attention during Government contract administration than during commercial contract administration in order to satisfy Government compliance checking requirements, i.e., the perceived need to verify that each specified requirement has been met or been complied with. Since the practices of best value are intricately interwoven with contracting practices, they need to be considered together.

5.6.3 Supplier Relationships

An ongoing relationship with a supplier provides a commercial buyer leverage to negotiate favorable rates for standard purchase agreements and volume purchase agreements. Long-standing relationships, where both the buyer and the seller have grown in their understanding of each other, with few surprises in the relationship mean that the contractual relationship would be characterized by less formal practices. Precedents established by long relationships could possibly reveal just as much about each firm's respective contractual intent as formal contractual instruments which would be relied upon to resolve disputes, ambiguities, and differences as a last resort.

5.6.4 Documentation and Specification Practices

Simplified product descriptions or functional specifications used by commercial buyers

may be incorporated by reference or simply stated in standard form contracts. Commercial buyers ordinarily require only that documentation normally provided with the product, and therefore detailed data deliverables do not have to be added to the contract with their usually attendant cost. With simplified data ordering, ordering data as part of or bundled with the product, the commercial contractual data ordering practice is greatly simplified. For example, there are usually no data rights issues and no complex management mechanisms such as Contract Data Requirements Lists to administer and manage the data deliveries.

5.6.5 Warranties

Seller warranty terms and provisions are usually incorporated into standard purchase orders and standard form contracts. Commercial buyers rely on the warranty to cover normal use of the product for a specified period of time. The warranty also includes provisions for the return or replacement of defective products. The warranty clauses incorporated in Government contracts contain similar provisions, but cover different periods of time or outline different terms for repair/replacement. If adequate coverage can be provided by the commercial warranty, it should be used.

5.6.6 Inventory Management and Commercial Distribution Systems

Contracts that make it easier for distributed Government customers to purchase from a variety of suppliers will enhance their ability to reduce inventories. Omnibus contracts and volume purchase agreements are two types of contracts that can be used effectively for this purpose.

5.6.7 Programmatic Practices

Less formal, more cooperative commercial contracting practices allow program managers the necessary flexibility to choose among various technical approaches, taking advantage of supplier relationships, best value factors, and through market research, new developments in the commercial marketplace.

5.7 REFERENCES AND SOURCES

Bibliography and Reference Numbers: 7, 13, 14, 17, 71

CHAPTER 6

DOCUMENTATION AND SPECIFICATION PRACTICES

6.1 COMMERCIAL APPROACH

Documentation and specification practices differ widely between Government acquisition organizations and those in the commercial business sector. There are three principal types of differences: specification practices, data delivery, and data rights.

Specification practices are those used to describe the item to be delivered and/or the need for the item. Commercial customers usually rely on suppliers for product development, but when they contract for a product to be developed, a generic product description, or at most a functional specification, is usually used to specify the item. This gives the supplier a broad degree of flexibility to produce the product in the most economical way possible while maintaining high quality. Acquisition needs are usually stated in functional terms, such as the performance characteristics of a 200 passenger airliner with a cruising range of 2,000 miles, with corporation color scheme and logo. They do not include requirements on how to produce an item. In this way products are provided at reasonable costs, benefiting both the buyer and the supplier.

Commercial buyers usually acquire product documentation as part of the product. Normally, suppliers only produce those documents necessary for the routine use of their product, and those are the only ones available. These are usually limited to users/operators and maintenance manuals. Generally, commercial buyers do not require more documentation than routinely developed, because it provides sufficient information to use the product effectively.

Finally, commercial suppliers usually retain all rights to the technical data associated

with their products. The buyer is only authorized to use the product for its stated purpose, and is not provided proprietary data that would enable the buyer to become a competitive producer. Firms with a technological lead in their commercial market are often unwilling to provide proprietary data and risk the loss of a technical advantage even when offered compensation for the potential loss.

6.2 GOVERNMENT APPROACH

Government specification practices are more complex than the commercial practice. The Government does not rely on standard commercial practices, but instead requires detailed specifications and standards to be met in the development of the product. This practice is carried over into the acquisition of existing products, significantly complicating the process.

In the DOD steps are being taken to reduce DOD reliance on detailed specifications. MIL-STD-970, "Standards and Specifications, Order of Preference for the Selection of" is one example. It requires the following order of precedence: nongovernment standards, commercial item descriptions, Government specifications stated in terms of functional requirements, and detailed Government specifications. However, the Government descriptions are still generally more detailed than the generic product descriptions a commercial buyer would rely on.

Government specifications can be characterized as being written to contend with "worst of breed" suppliers, and tend to include a level of detail that would be unnecessary with high quality "world class" suppliers. Most Government specifications and standards are not in accordance with commercial business practices, and suppliers must therefore deviate from cost-effective approaches to comply with the Government's demands.

There is a recognition that products per Government standards are more costly for the Government to acquire than it would cost a commercial buyer who relies on standard practices. Executive Order 12352, "Federal Procurement Reform," written in 1982 required the use of functional, design-type specifications. Recent legislation, such as 10 USC 2325, "Preference for Nondevelopmental Items," and various DOD acquisition reform initiatives have prompted the writing of more functional-type specifications and Commercial Item Descriptions (CIDs) to acquire commercially available products. This is a step in the right direction, but it is only a beginning. Although approximately 4,000 CIDs have now been written, more work needs to be done to expand their use in DOD solicitations.

Government documentation practices are also more complex than the commercial approach. Suppliers develop documentation to support the intended use of the product, but the Government requires much more detail. For example, the product and accompanying documentation may be designed to allow the user to repair the product down to the subassembly or line item level. However, the Government will often require documentation that would support repair to the piece-part level.

The Government also requires documentation that would never be requested by a commercial buyer or provided by the supplier, for example,

documentation of quality inspection or testing results, or certified cost and pricing data. There is, however, usually a need to obtain a minimum set of data in order to do organic maintenance that may not normally be commercially available. Examples are parts lists, identification of special tools or test equipment, identification of consumable items, storage and handling instructions, as well as operating and maintenance manuals.

Some Government-required documentation serves little purpose beyond providing evidence that a certain process was followed or test performed. Quality commercial suppliers earn good reputations by providing high quality products and immediately correcting defective ones when they occur. The evidence-type documentation certifies processes that a quality supplier would perform as a standard practice, and therefore increases costs for little increased value.

Changes to FAR Part 10, "Specifications, Standards, and Other Purchase Descriptions," are being drafted. If implemented, some of these changes will cause the Government to be more commercial-like in its specification practices. They include changing the order of precedence for specifications to be as in MIL-STD-970 described above, emphasizing writing specifications in terms of functions and/or performance characteristics, directing the selective application and tailoring of specifications and standards, and calling for use of commercial packaging.

(See Appendix A, Inhibitor #4, Specification Practices, for additional discussion of the Government's approach to this practice.)

6.3 PROS/CONS OF GOVERNMENT ADOPTION OF THE COMMERCIAL APPROACH

The Government can usually procure commercially available non-developmental items much quicker and at a much lower cost by using generic product descriptions and functional specifications. By relying on a supplier's standard business practices, the Government can also avoid the cost of excessive and unnecessary documentation. Proponents of process specifications cite uniformity and standardization of products over time as a benefit. However, if a product meets essential form, fit, and function requirements, that level of standardization may be all that is required.

Generally, the more Government buyers can satisfy their documentation needs like commercial buyers, the lower the acquisition costs should be. When unique Government needs take precedence, necessitating increased documentation, the Government should be prepared not only for the higher acquisition costs associated with the additional data, but also for the higher data life cycle costs due to increased storage, distribution, and data maintenance costs.

There are several specific advantages to adopting commercial documentation and specification practices. Relying on the supplier's standard manufacturing process is less disruptive of on-going operations, and increases competition because more suppliers would be qualified to bid. Greater use of generalized functional specifications will also qualify more subtier suppliers as spare parts sources, reducing Government reliance on the original equipment manufacturer (OEM) for spares. Reduction of documentation requirements will lower

the cost of data acquisition, document maintenance (change processing and status accounting), and compliance checking.

There are disadvantages to this practice that should also be considered. As discussed above, standardization suffers when detailed design specifications are not imposed. Interface of systems and interface management become more complex when commercial processes from multiple vendors are used, but not fully documented. Relying on the supplier's documentation also reduces the Government's ability to perform organic maintenance. As with all commercial practices discussed in this guidebook, care should be taken to ensure that the requirements of each individual acquisition are met in the manner that will provide best value to the Government, whether that means adopting a commercial practice or remaining with the Government approach.

6.4 INHIBITORS TO GOVERNMENT ADOPTION OF THE COMMERCIAL APPROACH

6.4.1 Inhibitors

There are several inhibitors to adopting commercial documentation and specification practices:

- Competition Practices (#1)
- Specification Practices (#4)
- Data Deliverables (#7)
- Protest System/Process (#10)
- Quality Assurance, Quality Control, and Inspections (#12)
- Preference for New Development Versus Nondevelopmental Items (#15)

The inhibitors are described in Appendix A.

6.4.2 Inhibitors-Commercial Practice Relationships

6.4.2.1 Competition Practices (#1)

The Competition in Contracting Act and other laws require the Government to conduct full and open competition to the maximum extent practicable. However, the Government's use of overly-detailed specifications to ensure clarity of requirements often reduces the number of potential bidders. Compliance with too many requirements discourages otherwise likely suppliers from bidding. Sometimes there are so many requirements at such a low level of detail, that it is practically impossible to demonstrate a product is qualified. Although use of detailed specifications are not prohibited by CICA, over-specification of requirements can reduce competition and cause the Government to pay more than is necessary to fulfill its needs.

6.4.2.2 Specification Practices (#4)

The Government's tendency to use detailed process specifications inhibits the use of less restrictive commercial-like purchase descriptions, functional specifications, and commercial item descriptions.

6.4.2.3 Data Deliverables (#7)

Use of detailed process specifications leads to requirements for excessive documentation to prove compliance with the specifications. Reliance on a supplier's standard business practices obviates the need for these data deliverables, and saves considerable amounts of money with no loss of capability.

6.4.2.4 Protest System/Process (#10)

The difficulties and delays inherent in processing protests lead contracting officers to over-specify in an effort to minimize the potential for subjective interpretation in resolving questions regarding the fairness of contract award decisions. Excessive specification often results in price as the noncontestable deciding factor on which to make an award.

6.4.2.5 Quality Assurance, Quality Control, and Inspections (#12)

The Government often contractually requires compliance with certain manufacturing processes or procedures with the intent of insuring a quality result. Instead of building in quality, the result is an "inspect-in quality" approach which has almost universally failed in improving the quality of delivered products. One reason is the perceived abdication of the quality responsibility from the builders to the inspectors. The commercial approach would first rely on the supplier's own quality assurance process in which the ultimate test of effectiveness is buyer product acceptance in a competitive marketplace. The commercial approach would also inspect only the finished product for acceptability. Suppliers constantly strive to maintain a reputation for product quality to remain competitive in the commercial marketplace, therefore "inspecting-in" quality is unnecessary and adds to product cost with no corresponding benefit to the Government.

6.4.2.6 Preference for New Development Versus Nondevelopmental Items (#15)

Detailed process specifications lead to the procurement of newly developed items versus non-developmental items, since the more requirements that are specified, the less likely it is an existing product will satisfy all of them. Most commercially developed products were not developed according to Government specifications, and therefore suppliers must "redevelop" existing products to comply with the Governments requirements.

6.5 STRATEGY FOR ADOPTING THE COMMERCIAL APPROACH AND COPING WITH THE INHIBITORS

The Government cannot simply adopt standard commercial documentation and only order commercially available data. It needs to consider all elements of the acquisition equation from intended use and deployment to the maintenance/support concept, including warranties. The Government and contractor may need to agree that documentation will be made available to the Government if the contractor stops making the product or goes completely out of business. It is important to note that commercial buyers and users of large systems, such as worldwide airplane fleets, seem able to operate with significantly fewer data deliverables than the Government. (See the description of the Specification Practices inhibitor in Appendix A.)

The Government has already begun to use functional specifications and commercial item descriptions to acquire commercially available products. However, for the Government to gain the full advantages of the commercial approach to documentation and specification, it must learn to rely on a supplier's standard business practices. Market research should identify quality suppliers of the needed product. The Government can, therefore, refrain from

specifying quality processes or requiring evidence-type documentation because the market research has proven the supplier's quality.

A best value evaluation process will allow contracting officers to evaluate different approaches to product development and allow them to take advantage of a supplier's innovation while still meeting the Government's functional requirements. Most importantly, contracting officers must learn to make awards based on good business judgement and best value for the Government, rather than relying on detailed specifications to take all uncertainty out of award decisions.

6.6 RELATED PRACTICES

6.6.1 Market Research and Surveys

Commercial businesses conduct market research to identify high quality suppliers and use the results of this research to refine their product description and select the supplier(s) that most adequately fill their needs.

6.6.2 Contracting Practices

Commercial businesses keep contracts simple and to the point. Generic product descriptions or functional specifications support this minimalist approach, along with acceptance of standard documentation and reliance on the suppliers standard business practices.

6.6.3 Nondevelopmental Items (NDI)

Commercial companies take advantage of commercially available nondevelopmental items to the largest extent possible. They rarely contract out for new development, relying instead on internal research and development, or joint development with a supplier. Because of this, commercial companies have little need for detailed process specifications.

6.6.4 Programmatic Practices

Commercial buyer reliance on a supplier's standard business practices vice detailed military process specifications allows the commercial program manager to take advantage of supplier innovations and suggestions for improvement.

6.7 REFERENCES AND SOURCES

Bibliography and Reference Numbers: 6, 25, 26, 31, 76

CHAPTER 7

WARRANTIES

7.1 COMMERCIAL APPROACH

Commercial firms use existing supplier warranties to the maximum extent possible. Commercial standard form contracts generally incorporate the terms of the supplier's warranty by reference. Commercial firms select suppliers on the basis of quality performance, and therefore rely on the pressures of a competitive marketplace to enforce acceptable standards of quality rather than demand restrictive warranty provisions to guarantee quality. Commercial warranties are constructed to provide an equitable level of protection to the buyer and streamlined warranty administration procedures for the supplier. In normal commercial practice the user of the item is the "holder of the warranty" and is responsible for ensuring supplier compliance with warranty provisions.

7.2 GOVERNMENT APPROACH

In the past, weapon systems were acquired without warranties. Now warranties are required by 10 USC 2403 for all DOD weapons system acquisitions, but should be considered for all other types of acquisitions. In general practice, contracting officers incorporate one of several warranty clauses specified in the FAR. These clauses are designed to ensure that the Government receives a quality product or is adequately compensated for defective products. The FAR clauses are generally more restrictive than the standard warranty offered by a commercial supplier, and provide the Government with greater remedy rights than would be offered a commercial buyer. This makes FAR warranties more expensive for the Government to acquire, and more difficult for commercial suppliers to administer. It also discourages some commercial suppliers

from selling to the Government. Commercial warranties are usually written to limit the liability of the producer. Negotiating or requiring a warranty that expands that risk will increase acquisition costs. Trade-off analyses are necessary to evaluate the cost of a warranty versus Government repair. (See Appendix A, Inhibitor #13, Warranties, for discussion of the Government approach to warranties.)

7.3 PROS/CONS OF GOVERNMENT ADOPTION OF THE COMMERCIAL APPROACH

The FAR warranty clauses are designed to provide the Government maximum protection from defective products. For commercially available products that are not critical to the national defense, however, the FAR warranty clauses are overly comprehensive. In adopting the commercial approach to warranties for commercial items, the Government relies on the supplier quality assurance systems to minimize defects, and on the commercially available warranty to remedy problems after Government acceptance. This results in a lower warranty cost for the Government and a level of protection more consistent with the importance and use of the product.

7.4 INHIBITORS TO GOVERNMENT ADOPTION OF THE COMMERCIAL APPROACH

7.4.1 Inhibitors

There are several inhibitors to the Government adopting commercial warranty practices:

Formality of the Government Acquisition Process (#2)
Contract Clauses (#3)
Warranties (#13)

The inhibitors are described in Appendix A.

There are additional factors which discourage Government use of commercial warranties. A few of these include the following:

The normal commercial warranty begins while the product is in Government inventory unless the contracting officer negotiates specifically that the warranty period begins at first use.

The Government has no organized system for registering warranties.

The Government does not have a standard process to get a product back through the supply system to the manufacturer for repair or replacement.

Some products are used at remote locations, on ships, or in submarines, making it difficult for manufacturer representatives to access and service them.

7.4.2 Inhibitors-Commercial Practice Relationships

7.4.2.1 Formality of the Government Acquisition Process (#2)

The Government tendency to rely on formal contract terms that require a specific quality process is counter to the commercial practice of relying on the supplier's internal quality system. Commercial buyers recognize that providing a quality product is in the best business interest of the supplier, and can therefore avoid formally contracting for quality. Similarly, commercial buyers

rely on the supplier's standard warranty rather than a detailed contract warranty clause.

7.4.2.2 Contract Clauses (#3)

Government contracting officers routinely include numerous contract clauses to cover all possible contract contingencies. This inhibits the Government from adopting the commercial approach which relies to the maximum extent possible on a supplier's standard business practices and keeps contract clauses to a minimum.

7.4.2.3 Warranties (#13)

Government contracting officers routinely incorporate the FAR warranty clauses in contracts to acquire commercially available products. These clauses are different, and occasionally more comprehensive, than the standard warranty the supplier would normally offer with the product. The supplier will therefore charge the Government the additional costs associated with administering a FAR-compliant warranty, or will decline the Government business.

7.5 STRATEGY FOR ADOPTING THE COMMERCIAL APPROACH AND COPING WITH THE INHIBITORS

There is no statute which states that the terms of the FAR warranty clauses must be included when acquiring commercial products. In fact, FAR Part 46.709 states, "the Government may adopt the contractor's standard commercial warranty if the contracting officer determines it is not inconsistent with the rights that would be afforded the Government under a warranty of supplies clause." This provision gives the contracting officer the authority to determine whether the Government is sufficiently protected by the terms of a commercial warranty. In adopting commercial business practices for the acquisition of commercially available items, contracting officers should be given the leverage and management encouragement to use commercial warranties to the greatest extent practicable. Otherwise, contracting officers will continue to incorporate the FAR warranty clauses to guard against accusations that the Government's interests weren't sufficiently protected.

One method available to support contracting officer decision-making is the best value evaluation process. If the commercial warranty is evaluated as a factor in a best value solicitation decision, the contracting officer can ensure that while the Government may not have acquired the most comprehensive (and therefore most expensive) warranty, the warranty acquired does provide a sufficient level of coverage at a cost that represents best value to the Government.

7.6 RELATED PRACTICES

7.6.1 Best Value

Commercial buyers evaluate supplier warranties as part of the best value evaluation process. Warranties can be evaluated in terms of comprehensiveness, suitability with use profile o ie product, and supplier history of honoring warranty agreements and cooperating in problem resolution.

7.6.2 Supplier Relationships

Buyers examine a supplier's competence in the administration of warranties. Responsive suppliers providing comprehensive support over the lifetime of their products are favored as potential long-term suppliers.

7.6.3 Contracting Practices

Commercial warranty terms are incorporated, either directly or by reference, in most commercial standard form contracts. Use of the standard warranty saves the supplier the effort of administering multiple warranties for the same product and, therefore, saves money for the buyer.

7.6.4 Nondevelopmental Items (NDI)

Since warranties are usually bundled, or offered with commercial products, adopting existing commercial warranties is comparable to adopting existing products.

7.7 REFERENCES AND SOURCES

Bibliography and Reference Numbers: 45, 48

CHAPTER 8

INVENTORY MANAGEMENT AND COMMERCIAL DISTRIBUTION SYSTEMS

8.1 COMMERCIAL APPROACH

In its simplest form, inventory management involves determining how much and when to purchase items that are used by a concern. In practice, inventory management is very complex, requiring analysis of the entire vertical supply structure, carrying costs associated with stockage, and penalty costs incurred when outages occur. The basic commercial approach is to maintain an inventory level that minimizes total cost, when all cost components are considered, without degrading customer support. A key input is the cost assigned to lost opportunities or delays because of outages.

Commercial sector firms have successfully reduced inventories by effective control of procurement leadtimes to minimize on-order requirements and by ordering smaller quantities, but on a more frequent basis, effectively shifting some of the inventory burden to the supplier. The ideal is to carry no inventory and have a highly reliable distribution system that can deliver whatever is needed "just in time" (JIT). In reality JIT systems do not mean that no inventory is maintained. Rather, inventory and associated costs are in the supplier domain. Techniques employed in this practice are negotiation of both price and leadtime, consolidated procurement of similar materiel, time-phased deliveries, multi-year procurements, and sharing requirements data with major suppliers. To achieve success with just-in-time deliveries, reliance on the supplier for quality control and direct integration of requirements with supplier production facilities is necessary. Success with JIT systems can greatly reduce operating and safety stocks.

8.2 GOVERNMENT APPROACH

DOD manages a highly complex, widely dispersed inventory of spare and repair parts valued at more than $50 billion. (47:1-1) DOD inventory requirements, on-hand and on-order, are based on demand, costs, leadtimes, and performance goals which are managed with state-of-the-art inventory models, sophisticated information systems and complex procedures to ensure the desired logistics support capability. In spite of these tools, DOD has experienced a significant growth in inventories over the past five years, although the commercial sector during the same period has generally reduced inventories relative to sales.

There are similarities between commercial and Government inventory management goals. For example, they share the goal to maintain as low a stock level as possible while minimizing the impact of outages. The significant differences are in the practices to realize that goal. There are three primary differences between DOD and commercial firms: managing supplier relations, supplier leadtimes, and order quantity size. (47:6-1) These areas have a great potential for realizing savings in DOD inventory management practices.

Additionally, the DOD has less latitude in relying on commercial distribution systems, because many DOD systems are one-of-a-kind and use nonstandard components. As a result, suppliers are faced with filling special orders that may require modifications to production runs, with no alternative market for the product should they produce too much. However, if an item is not available, the cost associated with outages is much higher, particularly when an item is critical to combat capability. Defense systems must have access to quick-reaction spares, leading to a reluctance to rely on supplier judgement and pipeline capacity for critical items. To ensure availability of critical components, spares are often procured as part of the basic system acquisition process.

DOD has adopted commercial-type inventory management practices where appropriate, particularly for NDI. For example, the Defense Logistics Agency Contractor-Operated Parts Depot supplies repair parts for commercial vehicles used by the military, eliminating the need for on-site inventory at each military installation. Similarly, the Air Force Contractor-Operated Parts Store and Contractor-Operated Civil Engineer Supply Store supply automotive and civil engineering parts.

8.3 PROS/CONS OF GOVERNMENT ADOPTION OF THE COMMERCIAL APPROACH

Increased use of the commercial approach to inventory management will lead to lower out-of-pocket costs through reductions in required storage space; product surplus; and spoilage, pilferage, and waste. Ultimately it would lead to a simpler inventory control system with potential reductions in personnel costs. These savings must be balanced with the cost of not having stocks when needed. For example, the Desert Storm operation would not have been possible without an adequate spares inventory.

With each one percent reduction in DOD procurement leadtime, combined with the impact on safety and operating levels of the shorter leadtimes, inventory requirements of the DOD would be decreased approximately $200 million with about one-third realized in

actual outlay reductions. When this is compared to similar reduction efforts by commercial firms which realized 10 to 40 percent reductions, the potential impact is tremendous. These projected savings are based solely on reductions in DOD administrative and production leadtimes to make them comparable to times experienced by commercial firms. (47:5-6)

Potential problems with the commercial approach revolve around the risk of not having critical components on hand when needed. Just-in-time delivery of parts is a very difficult task when there are long leadtimes For example, *Inside the Air Force*, April 5, 1991, page 1, quoted a JCS assessment that there is a 28 month leadtime for aircraft landing gear and 27 month leadtime for aircraft auxiliary power units and radars. Commercial distribution systems may not be able to guarantee quick-reaction delivery to remote bases. Further, a supplier is unlikely to modify a distribution system if the Government only represents a small portion of its total market. A major consideration will be the confidence in contractors judgement and pipeline capacity.

8.4 INHIBITORS TO GOVERNMENT ADOPTION OF THE COMMERCIAL APPROACH

8.4.1 Inhibitors

There are several inhibitors to the commercial practice of inventory management and leveraging commercial distribution systems. Most of these inhibitors act in ways to discourage suppliers from wanting to sell to the DOD, thereby reducing the number of potential, capable suppliers.

Competition Practices (#1)
Formality of the Government Acquisition Process (#2)
Paperwork Requirements (#5)
Favored Customer Status (#8)
Quality Assurance, Quality Control, and Inspections (#12)
Warranties (#13)

The inhibitors are described in Appendix A.

8.4.2 Inhibitors-Commercial Practice Relationships

8.4.2.1 Competition Practices (#1)

CICA requirements may limit the ability of the Government to enter into long term relationships with specific suppliers. Without a long-term commitment, suppliers will be reluctant to take the steps necessary to implement JIT systems.

8.4.2.2 Formality of the Government Acquisition Process (#2)

The chief mechanism used by commercial concerns to ensure adequate performance by suppliers is the promise of future business: good performance leads to increased orders; poor performance leads to reductions. Orders are often placed orally, based on a discussion of requirements. The formality of the Government contracting process can limit the ability of suppliers to be responsive as well as the ability of the Government to explicitly reward good performance through future commitments.

8.4.2.3 Paperwork Requirements (#5)

Paperwork involved with Government contracting can keep many potential

suppliers, particularly smaller concerns, from competing for Government business.

8.4.2.4 Favored Customer Status (#8)

Insistence by the Government that it receive a favored customer price when Government contracting and delivery requirements may lead to increased costs may result in a reluctance for suppliers to set up special distribution systems, particularly if there is no promise of increased future business.

8.4.2.5 Quality Assurance, Quality Control, and Inspections (#12)

The Government approach to quality may disrupt a supplier's production and distribution system, leading to increased costs as well as an inability to meet delivery requirements for both its Government and commercial customers. Quality assurance should be placed in the supplier domain, with the Government relying on reliable suppliers and commercial warranties, rather than trying to inspect quality in.

8.4.2.6 Warranties (#13)

A requirement for nonstandard warranties may lead to separate production, distribution, and storage of items for Government customers, discouraging some potential suppliers.

8.5 STRATEGY FOR ADOPTING THE COMMERCIAL APPROACH AND COPING WITH THE INHIBITORS

Commercial inventory management revolves around user/supplier relationships. The key to Government adoption of a commercial approach is to establish relationships with suppliers of spares and other stores that contain the characteristics of successful just-in-time systems. This involves vertical integration with the supplier, incentives for meeting requirements, and an atmosphere of trust.

The initial focus should be on commercially available items. The Government should convey long and short term needs to potential suppliers so that they can plan production and distribution systems. Contract vehicles that are more commercial-like and that eliminate all but the most basic clauses should be used, such as volume purchase agreements or indefinite quantity contracts with multi-tiered pricing and, where possible, multiple suppliers qualified. The use of requirements type contracts (e.g., a GSA Multiple Award Schedule (MAS) for DeskTop III computers), should be increased.

Significant savings may be realized by reevaluating how DOD computes its inventory requirements. The largest single component of DOD inventory costs is procurement leadtime, but safety levels and operating levels are also much higher than in the commercial sector. DOD safety levels are higher because of longer procurement leadtimes, while operating levels are higher because of less frequent procurement of larger quantities. Reducing leadtimes would reduce DOD inventory costs two ways: reducing the quantity and dollar value of items on order; and, with more frequent ordering, reducing operating levels. Book value of inventories would be reduced as well as actual physical inventories. Reduced physical inventory would also result in lower inventory maintenance costs. These savings could be realized with little impact on readiness, but

would require greater reliance on commercial distribution systems. (47:iii)

8.6 RELATED PRACTICES

8.6.1 Market Research and Surveys

Market research should be used to identify as many potentially qualified suppliers as possible. JIT practices are more likely to be successful if there are a sufficient number of suppliers from which to order. Additionally, some of the factors to consider in market research and market surveys are the differences in inventory, transportation, and distribution practices provided by the various marketplace participants.

8.6.2 Best Value

The ability to select suppliers on factors other than lowest delivered cost is critical to adopting commercial-like inventory management. Reliability and penalty costs for lost opportunities must be considered.

8.6.3 Supplier Relationships

Ongoing relationships will enable the Government to negotiate favorable rates and delivery schedules. Demand and asset data can be fully disclosed to long term suppliers on an ongoing basis to allow better coordination of supplier production. With good supplier relationships, a buyer may be able to arrange for a supplier to provide, on consignment, pools of commonly used consumables which would be owned and maintained at supplier expense.

8.6.4 Contracting Practices

Contracts that make it easier for distributed Government customers to purchase from a variety of suppliers will enhance their ability to reduce inventories. Omnibus contracts and volume purchase agreements are two types of contracts that can be used effectively for this purpose.

8.6.5 Nondevelopmental Items (NDI)

The greatest opportunity for the Government to reduce inventory exists for items that are produced in large quantities for many customers, where supplier risk can be spread over the entire marketplace.

8.7 "INVENTORY MANAGEMENT: BENEFICIAL PRACTICES FROM THE PRIVATE SECTOR" (47)

Although this referenced report (47) was completed in 1985, it provides many useful insights into the practice of inventory management. It examines the private sector inventory management environment and recommends selective adoption by DOD of a series of private sector practices. This work should be of particular interest to DOD program managers and logisticians interested in improving logistics support and spare part procurement and the practice of DOD inventory management. Appendix B of the report may be especially insightful, since it lists private sector inventory management initiatives and their results.

8.8 REFERENCES AND SOURCES

Bibliography and Reference Numbers: 1, 12, 19, 33, 34, 37, 47, 61, 65, 76, 77

CHAPTER 9

NONDEVELOPMENTAL ITEMS (NDI)

INTRODUCTION

Nondevelopmental items (NDI) are already developed and available hardware and/or software that are capable of fulfilling needs and requirements, thereby minimizing the need for costly, time-consuming research and development. (25:1-1) NDI is usually off-the-shelf and although it may be referred to as commercial off-the-shelf (COTS), it also includes items already developed for other agencies of the Government and products, or even entire weapon systems developed by foreign sources. (See 10 USC 2325.) The DOD acquisition system is designed to buy DOD-unique items and is not efficient in purchasing NDI.

This guidebook uses the definition of "nondevelopmental item" from 10 USC 2325:

"(1) Any item of supply that is available in the commercial marketplace;

(2) Any previously developed item of supply that is in use by a department or agency of the United States, a state or local government, or a foreign government with which the United States has a mutual defense cooperation agreement;

(3) Any item of supply described in paragraph (1) or (2) that requires only minor modification in order to meet the requirements of the procuring agency; or

(4) Any item of supply that is currently being produced that does not meet the requirements of paragraph (1), (2), or (3) solely because the item

(A) is not yet in use; or
(B) is not yet available in the commercial marketplace."

9.1 COMMERCIAL APPROACH

In the commercial sector, the acquisition of NDI is a well-practiced task. It is not governed by laws or regulations, but rather by sound business practice. A company will first decide upon the need and then usually proceed with a "make-or-buy" decision. The company will use tools and techniques such as market research, comparative market analysis, price analysis including opportunity cost, and other factors to arrive at a decision. The criteria for the decision to buy usually includes, as a minimum, cost, performance, and schedule; but may also include considerations such as market presence, future company growth directions, and many other reasons.

After the decision to buy is made, the market research is refined and other commercial practices such as supplier relationships and best value are followed. The decision to make or develop an item is similar in the Government, but motivations differ. The commercial firm usually does not have unique needs to be satisfied as does the Government. Cost plays a much more significant role. The decision to go with new development is usually out of necessity (e.g., no exisiting source available). A unique commercial motivation could be for market reasons, perhaps driven by a strategy to realize corporate growth objectives. The essential element in this practice is making the decision to go or not go with NDI. However, the decision need not be all or nothing. For example, a new development item may be made up of 50% NDI. Once the decision is made, other practices take over.

9.2 GOVERNMENT APPROACH

The concept of NDI acquisition in the Government is not new. Many studies and panels over the years have acknowledged the importance of NDI to the Government, particularly within DOD, to reduce costs, accelerate schedules, and to obtain the state-of-the-art. Several laws and regulations have been enacted requiring the preference for NDI over developmental items (see below).

9.2.1 NDI Regulatory Environment

The overall regulatory environment of laws, regulations, and other guidance that address NDI acquisition are listed in paragraph 7.B. below with a brief description of their contents.

9.2.2 NDI Acquisition Approach

DOD SD-2, "Buying Nondevelopmental Items (NDI)" (25) describes the steps necessary to acquire NDI. A brief overview of these steps is outlined here. (Also see Appendix A, Inhibitor #16, Preference for New Development versus Nondevelopmental Items.)

9.2.2.1 NDI Feasibility Investigation and Analysis

After defining the need, the next step is to identify NDI alternatives through a market analysis to determine the availability of marketplace products to satisfy the needs and requirements. This analysis is performed in two steps. First, perform market surveillance and second, conduct a market investigation. (Also see Chapter 2, Market Research and Surveys.)

9.2.2.2 Selecting and Preparing the Requirements Document(s)

The requirements document(s) for NDI solicitations should be written as much as possible in terms compatible with standard commercial practices. Nonstandard commercial terms and conditions should be highlighted, especially those for quality assurance to ensure there is as complete an understanding of requirements as possible. Types of requirements documents used in solicitations include statements of work (SOW), contract data requirements lists (CDRL), and product specifications.

9.2.2.3 Solicitation and Source Selection

Through the solicitation process, acquisition managers obtain offers from those manufacturers or suppliers who desire to provide an NDI to the Government. The documents used for solicitations include Requests for Proposals, Requests for Quotations, and Invitations for Bid. Evaluation criteria should be explicitly stated in the solicitation document. DOD SD-2, Buying Nondevelopmental Items (NDI) (25) also provides guidance on factors such as warranties, small and disadvantaged business considerations, data rights, and others.

9.2.2.4 Product Assurance

Product assurance is a general term that refers to those efforts directed toward ensuring that the systems and equipments that are provided to operating forces have performance characteristics that satisfy the mission need stated in the operational requirements documents. Product assurance considerations for NDI acquisitions include quality assurance, reliability, and maintainability. The primary difference in item quality is that NDI have a relatively known history of reliability, performance, and maintainability which newly-developed items do not possess except as goals and objectives. These known performance factors should be considered during the acquisition decision process and weighed according to the needs of the end-user.

9.2.2.5 Test and Evaluation

NDI acquisitions may use reduced amounts of testing when existing data is sufficient. The goal is to minimize NDI testing requirements by using existing historical data and marketplace acceptance of the product. (25:7-1) Testing of NDI should focus on those areas where data is inconclusive, where performance assessment against unique operational requirements must be conducted, and/or where the environment in which the NDI will be used is different from the one for which it was designed and tested.

9.2.2.6 Integrated Logistics Support (ILS)

ILS is considered one of the most difficult aspects of NDI acquisition, since the item's support structure may not have been tailored to the DOD. It therefore becomes more difficult to evaluate and plan how that existing support structure can best satisfy DOD and service needs. Every NDI acquisition requires an individualized logistics support strategy based on the specific characteristics of the program. ILS considerations include

- Maintenance (including warranties)
- Manpower and personnel (documentation, skills)
- Supply support (spares and repair parts)

Technical data (commercial manuals vs. MIL-SPEC, data rights)
Training and training support
Facilities (special environments, mismatch between military facilities and NDI requirements)
Other factors.

9.3 PROS/CONS OF GOVERNMENT ADOPTION OF THE COMMERCIAL APPROACH

The commercial sector and the Government use NDI for similar reasons including

Shorter acquisition lead-times
Elimination or reduction of research and development cost
Use of state-of-the-art technology
Reduction of technical, cost, and schedule risks. (25:1-4)

Schedule and timing are critical elements in the commercial sector. Using off-the-shelf proven products and technology helps reduce the need for and the length of a demonstration/validation development type effort in addition to lowering technical risk. These are of immeasurable benefit in realizing schedule commitments. Time to market is critical in the commercial sector and is similar in importance to Initial Operational Capability (IOC) in the DOD. Use of NDI helps to reduce schedule uncertainty/risk with known or proven technology and products. Another important advantage of NDI is that some NDI may have higher reliability due to a larger population of an item being in use. Through wider use, failures are detected and design fixes are implemented earlier in the life cycle to correct "infant mortality" problems and those usually associated with new manufacturing processes. These advantages prompted Congress to enact laws that require a preference for NDI over developmental items. (See the discussion of 10 USC 2325 and 41 USC 253 below.)

On the other hand, there are some negative aspects to NDI acquisitions. One reason the Government may not now be taking full advantage of NDI is because some commercial sector firms are reluctant to do business with the Government. Some sources have claimed that the reason is due to restrictive Government practices, such as over-specifying requirements, intrusive auditing (78:6), requiring expensive and commercially sensitive cost and pricing data (81:2), as well as others that are discussed in this guidebook. Managing this reluctance, whether overt or covert, is one of the disadvantages for DOD program managers who wish to adopt NDI.

Another disadvantage in NDI is that the Government must evaluate some performance and support factors more carefully than commercial sector customers. Factors such as logistics support, test and evaluation, reliability and maintainability, electromagnetic compatibility, and safety may be more important to the DOD buyer than to the usual commercial customer. One example of this problem is the extremely wide range of environmental conditions, such as temperature, dust, humidity, and shock in which DOD equipment must be able to sustain operations to be capable of deployments such as Desert Shield and Desert Storm.

Compounding the program manager's difficulties are rules and regulations intended to be applied to items under development, but also imposed on NDI. DOD policy is being changed to correct many of these

problems, e.g., waiving requirements for extensive tests and evaluation by using existing manufacturer-supplied or user-supplied data. However, more education and training of acquisition personnel is needed to completely correct these problems. All of these issues require an earlier consideration of lower-level detailed requirements and additional planning during the beginning of the acquisition process. These changes in themselves could delay an acquisition when an operational need is not well defined initially.

9.4 INHIBITORS TO GOVERNMENT ADOPTION OF THE COMMERCIAL APPROACH

9.4.1 Inhibitors

There are several inhibitors to the practice of using nondevelopmental items (NDI).

Specification Practices (#4)
Paperwork Requirements (#5)
Data Rights (#6)
Audit Rights (#11)
Preference for New Development versus Nondevelopmental Items (#15)

The inhibitors are described in Appendix A.

9.4.2 Inhibitors-Commercial Practice Relationships

9.4.2.1 Specification Practices (#4)

10 USC 2325 currently states that requirements of the DOD must be stated in a manner that does not inhibit the procurement of NDI. However, many still believe that overspecified environmental conditions are the primary inhibitor to using the NDI process. The DOD traditionally has overspecified requirements, e.g., using the MIL-SPEC system. The commercial approach is to base an acquisition on a fairly flexible set of requirements which favor innovative thinking. The DOD approach is often too rigidly structured and can cause unnecessary cost increases if, for example, the item is not the required color and has to be stripped, reprimed, and repainted. The DOD should increase the emphasis on expressing its solicitation requirements in clear functional/operational terms instead of mandating compliance with military specifications or standards unless absolutely necessary.

9.4.2.2 Paperwork Requirements (#5)

The commercial sector relies on market mechanisms such as competition to determine costs and prices. Industry has complained that cost and pricing data is expensive to provide, is competition sensitive, and that providing it lengthens the procurement process. Buyers from private industry would not normally expect nor request such information. In certain circumstances the law requires cost and pricing data for Government contracts, i.e., Truth in Negotiations Act and Competition in Contracting Act. David Packard, who chaired the President's Blue Ribbon Commission on Defense Management in 1986, was reported (81:2) as saying:

> Today a new commercial product is often very difficult to buy in the Federal Government. Insistence on submission of cost and pricing data from the commercial companies because a product is new or innovative is a Government practice which serves no one well. Market research, price analysis, comparative market analysis,

and other similar techniques, should allow the Government to determine a fair range of price reasonableness as a basis for negotiations.

In summary, Mr. Packard said that the commercial approach to acquiring NDI is done in a manner that does not vitiate the customer-supplier relationship as the Government approach appears to do. Further, Mr. Packard suggested replacing the requirement for cost and pricing data with a more agreeable, less intrusive commercial approach.

9.4.2.3 Data Rights (#6)

Data rights refer to the authority to use, duplicate, or disclose data. The Government acquires data rights to develop specifications, to increase competition, and to foster technological development. Industry perceives that the release of data to competitors will erode their competitive edge, and has cited this as a major impediment for doing business with the Government. Because data rights are considered "proprietary", commercial firms are reluctant to disclose technical or other data to customers. Commercial contracts do not request this kind of data because it is not a sound business practice. DOD buyers should consider depending more heavily on alternatives, such as warranties and training, as do their commercial counterparts, resorting to acquiring data rights as a last option instead of a first option. If necessary, licensing is available as an alternative to purchasing technical data, e.g., exclusive, semi-exclusive, or non-exclusive licenses.

9.4.2.4 Audit Rights (#11)

Audit rights are clearly Government rights that differ greatly from commercial practice. This results from the unique role of the Government in spending public funds. However, intrusive auditing has been listed as a top industry complaint in the acquisition of NDI. Commercial vendors are reluctant to allow any customer, Government or not, to audit their books. Many commercial companies would rather not do business with the Government than allow this invasion of their proprietary information. Some have expanded the scope of this complaint further by including all Government visits to their facilities as being intrusive and interruptive of normal business operations, decreasing productivity, and increasing costs. Customers in the commercial sector have no similar auditing rights. To industry, customer audits are intrusive and unnecessary.

9.4.2.5 Preference for New Development Versus Nondevelopmental Items (#15)

As mentioned above, the preference for NDI over to-be-developed items in DOD acquisition has been established in law. However, some believe that, despite this, acquisition managers still prefer new development programs over NDI. Some attribute the bias to the "not-invented-here" syndrome. Although this syndrome is present in both the commercial and Government sectors, it is more prevalent in the Government sector where there has been an historic preference for developmental items. In the past, requirements documents have been written in a way that discourages NDI and promotes unique developments. Over the past fifteen years, major attempts have been made to reduce this preference

for developmental items through laws and regulations, but a great deal more effort is required to overcome the bias in Government acquisition offices.

9.5 STRATEGY FOR ADOPTING THE COMMERCIAL APPROACH AND COPING WITH THE INHIBITORS

9.5.1 Policy

The first step in achieving optimum use of NDI in Government acquisitions, establishing and promulgating clear policy direction, has been taken. The law already states that the DOD should have preference for NDI over developmental programs. This is implemented in the DOD 5000 series documents. DODD 5000.1 (Defense Acquisition) states that NDI acquisitions are higher in the hierarchy of preference of potential new starts than new development programs. DODI 5000.2 (Defense Acquisition Management Policies and Procedures) devotes only a single chapter (Part 6, Section L) to the acquisition of nondevelopmental items. (23:Section 6-L)

9.5.2 Training and Education

The second step is training and educating acquisition personnel in NDI acquisition. This step is being implemented. DODI 5000.2 authorizes the Assistant Secretary of Defense for Production and Logistics (ASD (P&L)) to publish a Department of Defense Nondevelopmental Item (NDI) Handbook, DOD 5000.37-M. An NDI handbook was published in October 1990 (25). It covers a variety of NDI issues, including those discussed above. It was written primarily for program managers and contains "... information helpful in implementing NDI acquisitions, without inhibiting creative and innovative strategies." (25:1-7) In addition, ASD (P&L) has prepared an NDI acquisition training course which introduces NDI concepts and NDI procedures, such as the preparation of Commercial Item Descriptions and technical requirements documents, and concludes with practical case studies.

The services have complemented the DOD's efforts by establishing their own implementation procedures. For example, the U.S. Army Communications Electronics Command (CECOM) has established an NDI advocate. All programs are required to justify the use of development vice NDI to the NDI advocate. If such use cannot be justified, the program must use NDI. CECOM has also set up a data base of NDI products, acquiring extensive marketplace knowledge through market investigations and soliciting industry to inform CECOM of NDI products from industry research and development. (59:62) (58:92)

Another example, established by the Naval Telecommunications System Integration Center is the Defense Message System (DMS) Nondevelopmental Item Demonstration Facility, located in Cheltenham, Maryland. The DMS NDI Facility provides a location for vendors to demonstrate that their products comply with DMS architecture and objectives. (57)

9.5.3 Implementation

The final step is implementation, where most effort now needs to be focused. There remains a lot of frustration on the industry side of the NDI acquisition equation. New NDI procedures, such as waiving the need for intrusive audits, need to be fleshed out to promote the use of NDI. On a cultural

level, better industry-Government relationships need to be established and the way in which Government does business with the private sector needs to be reformed. NDI can offer the Government better technology, lower costs, lower risk, and accelerated deployment. Industry can prosper though increased sales to the Government, which will, in turn spawn new growth and competition. The overall benefit of a new industry-Government relationship will positively impact our national security, the defense industrial base, and economic competitiveness. It is a potential "win-win" situation.

9.6 RELATED PRACTICES

9.6.1 Market Research and Surveys

The use of market analysis, including market surveillance, research, surveys, and investigation or similar techniques, is required to justify the non-use of NDI in DOD. More importantly, good market surveillance and investigation will help determine what NDI is available in the marketplace to satisfy a DOD acquisition requirement. These are a necessary prerequisite to acquiring NDI and adopting this practice.

9.6.2 Supplier Relationships

Commercial firms often turn to their existing supplier base for availability of NDI to satisfy new requirements. If the solution is not an NDI per se, but a modified NDI or perhaps even a new development item, existing supplier relationships would be a first source of preference, since they represent proven, reliable past performance. In other words, with supplier relationships, the initial market survey for NDI could be conducted rather quickly by surveying the existing supplier base instead of the entire marketplace, thereby expediting the process of acquiring NDI.

9.6.3 Documentation and Specification Practices

One of the impediments to the acquisition of NDI discussed above (4.B.a.) is the extensive use of MIL-SPECs and MIL-STDs by DOD buyers. The adoption of commercial specification practices with functionally stated requirements and increased design flexibility would encourage more vendors to respond to DOD solicitations, increasing the likelihood that an NDI would satisfy the DOD requirement(s).

9.6.4 Warranties

Warranties are a part of most commercial products. Their provisions should be better exploited in order to more fully realize the benefits inherent in buying NDI. The use of commercial warranties can reduce the need for data reprocurement rights, since customers would rely on the supplier to service/fix a product instead of the customer expecting to do it, necessitating the acquisition of the data required to enable him to do so.

9.6.5 Inventory Management and Commercial Distribution Systems

The greatest opportunity for the Government to reduce inventory exists for items that are produced in large quantities for many customers, where supplier risk can be spread over the entire marketplace.

9.7 NDI REGULATORY ENVIRONMENT

The overall regulatory environment of laws, regulations, and other guidance that address NDI acquisition include the following:

9.7.1 10 USC 2325 (Preference for Nondevelopmental Items):

Stipulates that acquisition requirements of the DOD must be stated in a manner that does not inhibit the procurement of nondevelopmental items.

9.7.2 41 USC 253h (Procurement of Commercial and Nondevelopmental Items)

Requires executive agencies to

(1) State requirements such that NDI may be procured to fulfill such requirements,

(2) Conduct market research to determine whether NDI are available or could meet agency needs,

(3) Prepare a simplified uniform contract for the acquisition of NDI,

(4) Require cost or pricing data only when necessary for the evaluation of reasonableness, and

(5) Require, when appropriate, offerors to demonstrate that their product(s) have achieved a level of market acceptance.

9.7.3 Nondevelopmental Item Acquisition Act

This bill, first introduced in 1989 and reintroduced in 1991, has not been enacted into law. If it is, it will provide for the efficient and cost effective acquisition of NDI for Federal agencies. The purposes of the NDI Acquisition Act are to

(1) Establish a preference for the use of performance specifications and the acquisition of nondevelopmental items by Federal agencies,

(2) Require training of appropriate personnel in the acquisition of nondevelopmental items,

(3) Require Federal agencies to designate personnel responsible for promoting the acquisition of nondevelopmental items and challenging barriers to the acquisition of nondevelopmental items,

(4) Reduce impediments to the acquisition of nondevelopmental items by Federal agencies.

9.7.4 Department of Defense (Acquisition) Directives (5000 series)

Portions of this series of documents implement 10 USC 2325. One section of DODI 5000.2 is devoted to the policy for DOD NDI acquisitions.

9.7.5 Department of Defense SD-2, "Buying Nondevelopmental Items (NDI)", October 1990

Provides general guidance for acquisition managers and others involved in acquisition on approaches to NDI acquisitions.

9.7.6 Service Specific NDI Guidance

Each Service has its own implementation of higher level guidance on the acquisition of

NDI. They establish policies and assign responsibilities to promote more effective material acquisition through the use of NDI to fulfill service requirements.

(1) Department of the Navy Handbook for Implementation of Nondevelopmental Item Acquisitions (NAVSO P-3656, June 1988), prepared by the Office of the Specification Control Advocate General of the Navy.

(2) U.S. Marine Corps Nondevelopmental Item Handbook (Marine Corp Research, Development, and Acquisition Command, May 1989)

(3) The COTS Book: Selecting and Supporting Commercial Products for the Military, United States Air Force.

(4) Material Acquisition Handbook, United States Army (AMC-TRADOC Pamphlet 70-2) March 1987.

9.7.7 NDI Course

The Office of Assistant Secretary of Defense for Production and Logistics offers Nondevelopmental Item Acquisition Training for program managers, specification writers, contracting officers, etc., from each of the services and the Defense Logistics Agency.

9.8 REFERENCES AND SOURCES

Bibliography and Reference Numbers: 23, 25, 57, 58, 59, 81

CHAPTER 10

PROGRAMMATIC PRACTICES

INTRODUCTION

Unlike the remainder of this guidebook, this chapter focuses primarily on the acquisition of weapons systems, subsystems, and capital equipment; and not on the procurement of supplies and services.

There are seven discrete practices grouped under the general heading of programmatic practices. Each will be discussed singularly or in combination with others. The thrust of many of the commercial practices described in the references has been addressed in the Goldwater-Nichols legislation, Packard Commission recommendations, and Defense Management Review. Institutionalization of many of these recommendations is coming to fruition in current DOD and Service policy and realignments.

10.1 COMMERCIAL APPROACH

10.1.1 Commitment to Program Success Crosses Organizational Lines

Commercial companies display a real organization commitment to the success of major programs. The commercial marketplace severely penalizes companies which do not bring new products on-line once major resources have been committed. The functional staffs, operational and program managers, exhibit shared goals and direction. Managers of functional departments and staff directorates are responsible for providing resources and assisting the PM to solve problems; they are not involved with program oversight and direction. (21:viii)

10.1.2 Management Emphasis on Outcome Versus Process

Commercial program managers are given great authority and responsibility with very few review levels, two or three at most. In successful companies, the emphasis is on enabling the line acquisition managers to do the job. Acquisition program managers or their line managers have direct control of funds with minimal project reporting. Pay and rewards are directly associated with program success. Emphasis on delivery schedule and performance is typical of commercial programmatic practices.

10.1.3 Program Stability

Key attributes of program stability are steadiness of purpose, a firmly established plan and a supportive system. A characteristic of stable commercial programs is that they tend to have goals and objectives which are also stable over time. Some commercial techniques for enhancing program stability are focused on top managers providing vision, being actively involved in the program, and providing an adequate support system. Other techniques include putting a higher priority on schedule versus cost and performance. In addition, authority, accountability, responsibility and resource control, which provides experienced people, are given to line managers.

At the outset of a commercial program, a program manager (PM) enters into a fundamental agreement or contract with the CEO on specifics of performance, schedule, and cost. So long as a PM lives by this contract, the CEO provides strong management support throughout the life of the program. The PM has maximum incentive to make realistic estimates and, in return, gets maximum support in achieving them. The CEO does not authorize engineering development for a program until the board of directors is solidly behind it, and prepared to fund the program fully, as well as authorize the CEO to run it within the agreed-to funding.

Stability and commitment to program schedule are interdependent. A stable program can be executed more quickly. A project completed quickly is subject to forces of change for a minimum period of time. Any attempt to change schedule, to either advance or relax schedule, will always lead to increased costs for the same capability.

10.1.4 Change Management and Philosophy

The commercial practice avoids early specification of design details. It allows broad latitude in design flexibility while the design is maturing, without the burden of formal change control. As a result, tradeoffs of performance and cost are made while maintaining schedule. The goal is to eliminate unplanned changes, since all changes impact both cost and schedule. The emphasis is on applying available and proven technology. The product baseline is frozen for the duration of the production cycle or until the next block improvement.

Another change management practice is to plan product improvements early so the incorporation of the actual changes is easier. The planning for future change occurs during the design process. Although the exact details of the change are not usually fully known, provisions for the future change are made part of the design. Two

current concepts to incorporate not-yet-available technology are preplanned product improvement and evolutionary development.

10.1.5 Schedule is Paramount

Once a program is approved for development and/or implementation, schedule is the driving motivation and first priority in the commercial environment. Schedule is market-driven due to the implications of late entry on long-term market share and the need to recover investment and overhead costs quickly. For example, late entry may allow a competitor to begin marketing a similar or competing product first, saturating the market and making competition difficult.

Performance features are the next priority. Sufficient product performance is ensured but stretch goals are used with contingency developments to facilitate trade-offs should the schedule be jeopardized or development costs become excessive. Preplanned product improvement and evolutionary development are current concepts for incorporating desired technology or features not available at planned schedule cutoff points.

Funding is the business tool to achieve on-time program completion. Generally, a PM is provided a management reserve or buffer to use to stay on schedule and solve unexpected technical problems.

10.1.6 Top Management Involvement in Programs

Successful major systems programs in the commercial acquisition environment are the product of unequivocal top-management approval and support. In projects reflecting the strategic emphasis of the company, there is clear linkage to organizational business strategy and a direct involvement of the CEO. Involvement does not mean micro-management, but it does mean awareness of the project's current status, an active questioning, and willingness to commit the organization's resources to resolve problems. Top managers lead selected programs by communicating the vision, reviewing programs often, and solving problems beyond the control of lower-line managers. Once a decision is made to enter engineering development, the CEO commits to seeing it through.

10.1.7 Program Management Authority and Control

Program management authority is assigned to a clearly-visible acquisition line manager with a program manager or other appropriate title, but this authority is not shared with functional managers. Acquisition line managers generally are in complete control of their projects and are responsible and held accountable for project success. They have authority to make timely decisions and control critical resources, especially participating personnel.

Successful commercial programs also depend on focused decision-making up the line. PMs of major systems have and use direct access to top management to keep the CEO or surrogate informed so they are able to resolve problems beyond the capability of the PM. Senior functional managers and executives are charged with providing support to line management but not direction of lower-line program management. They provide experienced, professional personnel with the functional expertise to give the PM the opportunity to get the job done right the first time.

10.2 GOVERNMENT APPROACH

10.2.1 Commitment to Program Success Crosses Organizational Lines

The DOD is rarely able to commit to the success of an acquisition program across organizational lines. DOD acquisition programs are initiated in response to validated military needs which become approved requirements. They are prioritized and compete for funds in the Planning, Programming and Budgeting System (PPBS) process on an annual or biennial basis, at Service, DOD, and OMB levels. They continue to compete for funding from Congress during the authorization, appropriation, and enactment process. Changes to total obligation authority (TOA) and funding profiles are made routinely within the Service, OSD, and OMB hearings prior to completing the President's Budget.

Generally these changes are well-meaning attempts to improve programs but may be solely for the necessity to balance allocated TOA among the various programs. The Congress often changes funding profiles, according to their perception of political, military and social considerations, as well as budget constraints. Programs that are not firmly supported and entrenched in the core level of the Program Objectives Memorandum (POM) and budget may see frequent changes or reductions in funding. In the past, the need to stabilize funding and commit to program success or to kill unsuccessful programs so that others may proceed in a stable manner has been given lip service at best. Consequently there is limited institutional commitment to the success of programs. The resultant instability fosters program stretches, quantity reductions, and limited success when compared to original cost, schedule and quantity objectives.

10.2.2 Management Emphasis on Outcome Versus Process

In a Rand study of the comparison of commercial and military communication satellite acquisition practices, it was found that the Air Force approach, although primarily performance oriented, allocated significant attention to cost and process control. In contrast the commercial satellite procurement approach emphasized delivery schedule and performance, characteristic commercial practices. (69)

Commercial program manager performance is usually evaluated based on the final outcome of the program, while Government program managers are usually evaluated on their ability to follow the acquisition process and meet scheduled program milestones. This emphasis puts pressure on Government program managers to achieve milestones even if the program is not ready. It tends to stress form rather than content. This could motivate the PM to conduct a scheduled design review without consideration of readiness for the review or what would be achieved by conducting it. The final product is generally adversely affected, with less-than-required performance, by overemphasis on process instead of outcome.

10.2.3 Program Stability

Program stability is a reflection of commitment to program success, as previously discussed. Efforts to improve stability in DOD acquisition programs must first be made through firm commitment and advocacy on the part of the user (requirer).

For stability, the user must first have done his homework in mission analysis versus the threat and must prioritize programs at high enough levels that they will be stable during the POM and budget development process. A well-defined investment strategy to support the analysis reinforces the prioritization. In addition, from a political and practical standpoint, successful Government contractors have learned to assist in stabilizing Government programs by structuring them so that the research, development, and production work is distributed throughout as many states as possible. Special considerations are often given to focusing work in the states of influential Congressmen and Senators who are in a position to impact the authorization and appropriation processes. If the User is at the Commander in Chief (CINC) level, he carries significant weight and credibility during Congressional hearings. In this manner, programs that may not have the highest user priority, or the most successful management, may be preserved and stabilized in the enactment process, while higher priority and better managed programs may become destabilized or curtailed.

A well-managed program with a small experienced staff is more likely to be a stable program because of the necessity of small staffs to manage by exception. Success in achieving schedule, cost, and performance objectives tends to foster stability but does not guarantee it in a fiscally constrained environment. From the PM's perspective, most of his problems are caused by instability. No one seems to remain in charge long enough to see the acquisition plan through. This has been a problem at all levels and is apparent even at the highest levels of management where there have been five Defense Acquisition Executive incumbents over the last six years. A similar situation has existed within the Services. Policies and thrusts change with each incumbent and their key staffs with resultant perturbations on the program manager. On the commercial side, the program manager and other key personnel tend to remain with a successful program until completion, unless the person is promoted.

The DOD has begun implementing commercial-like "baseline" concepts (66:12), however, the baseline may be changed because of factors mostly outside the control of the PM. Although baselines force a PM to better manage his program, the external factors that force baseline changes frequently obviate the benefits of improved management through forced schedule slips, reduced quantities and increased unit costs.

10.2.4 Change Management and Philosophy

The Government often freezes the configuration baseline (prohibits changes to a baseline) too early in development, precipitating numerous changes to the configuration and technical data package in the form of Engineering Change Proposals (ECP)s. ECPs are expensive to administer and to retrofit to development and production prototypes.

The DOD also stresses a preplanned product improvement (P3I) philosophy as the best way to manage change in DOD materiel requirements, except in certain cases such as first line fighter aircraft where technological preeminence must be maintained. DOD program managers generally plan to design systems so that they can be upgraded, preferably on a modular or submodular

basis, at periodic intervals to keep up with technological opportunities and evolving threat requirements. Typically weapon systems are planned for block improvements at various intervals during their useful life. Prudent change management offers the user a cost-effective alternative to the development of new systems, where feasible. The new DODD 5000.1 specifies that new acquisition programs only be initiated after fully examining alternative ways of satisfying military needs. Modification is the first priority in the hierarchy of alternatives for meeting materiel needs after non-materiel choices such as a change in doctrine and/or tactics.

10.2.5 Schedule is Paramount

In the past, DOD acquisition programs have been largely schedule driven. However typical DOD acquisition schedules have been set interminably long due to the number and variety of necessary bureaucratic procedures and milestones that must be achieved to get through the various phases of the acquisition process and the associated milestone reviews. The 1990 Defense Science Board study on defense acquisition streamlining identified 840 discrete acquisition activities that may typically be required on a post-Packard Commission acquisition program. Once a PM commits to a schedule, cost, and performance baseline he is motivated to hold to schedule, since his performance evaluation is considered to be based on meeting this baseline.

10.2.6 Top Management Involvement in Programs

The Defense Management Review recommended that the Service Program Executive Officers (PEOs) be relieved of all duties except those associated with managing the acquisition programs in their portfolios. The PEO is directly responsible to the service acquisition executive (SAE) for the execution of a portfolio of programs. As such, the PEO exercises the authority of the SAE, the top management level. The PEO organization reports directly to the SAE and not to a part of his staff. The PEO has a privileged line of communication to the SAE to ensure close and continuing communication. These principles apply equally to those programs not managed by a PEO, for example the Air Force has established Designated Acquisition Commanders (DACs) for programs not managed by a PEO.

PEOs and DACs are responsible and accountable to the SAE for program execution within the baseline. They are also charged with ensuring that the program offices have appropriate facilities, personnel, and resources. In addition, they have been given below-threshold investment appropriation reprogramming authority for their portfolios. This new authority is a major tool to assist them in addressing the cost, schedule, and performance objectives of their programs.

10.2.7 Program Management Authority and Control

Prior to the Packard Commission and the Goldwater-Nichols Act, responsibility for acquisition programs was dispersed and unclear. The role of the SAE was not clearly defined and his authority was limited. With the enactment of the Goldwater-Nichols legislation and the DMR, the roles of top management are clearly defined from the acquisition executives at OSD and the Services through the Program

Executive Officer or Designated Acquisition Commander to the Program Manager. A single chain of line authority has been created with direct access to top management. The top levels of management are responsible and are being held accountable for their programs. Cancellation of the Navy A-12 program with censure of the PM and PEO demonstrates that accountability is being enforced. The incentive from this incident has spurred the SAEs to promote better visibility of service acquisition programs at all levels.

Span of control necessarily limits the direct involvement of top management in Government programs. The Air Force alone has over 700 programs for which the Acquisition Executive is responsible. The PM and PEO must be provided direct line management access to the top management officials, as recommended by the Packard Commission and as prescribed in the DMR.

10.3 PROS/CONS OF GOVERNMENT ADOPTION OF THE COMMERCIAL APPROACH

10.3.1 Commitment to Program Success

The management of Government programs would be immeasurably improved if there were a universal commitment to the success of programs at all levels and across organizational lines. Since the needs and priorities of the Government vary with many factors, including the threat, technology, politics, personalities, and especially resources; commitments can not always be maintained for the life of the program. Even programs classified as within a Service's "Big Five" have become, within a few years, at risk for funding in a changing and fiscally constrained environment where they compete with other programs and with new requirements. This lack of commitment weakens the program's stability and has traditionally resulted in cost increases and schedule delays.

10.3.2 Management Emphasis on Outcome Versus Process

Two characteristics of Government promote a focus on process rather than outcome. One is the bureaucratic nature of Government operations and the other is the two-year life span of Congress. Those who are entrusted with the expenditure of public funds are held accountable for their performance. Consequently, there is a natural tendency to respond in kind, i.e., report on how something was done, the process that was followed, and not on what was achieved. Given that environment, it is very difficult for DOD program managers to be given the long-term authority and responsibility and to be held accountable for long-term results. There are exceptions to this situation, such as the Navy's Strategic Systems Program Office; however, such examples will continue to be rare until more is done to make DOD program managers accountable for outcomes, rewarding them accordingly. The result will be greater program success as measured in terms of program outcomes, e.g., cost, schedule, and performance, instead of in terms such as not letting funds expire, meeting report submittal dates, meeting milestone briefing dates, etc.

10.3.3 Program Stability

Program stability is one of the most important factors in effective program management. The Government must tolerate some instability in order to

accommodate changing threats and technology and evolutionary requirement development as it is now described in the DOD 5000 series. Many factors that cause program instability are embedded in our free society and the constitutional distribution of powers, and reflect changes in the political environment. The starts and cancellations of the Air Force B-1 program are examples of program instability driven by the political environment. Every effort should be made to stabilize DOD acquisition programs to the maximum extent consistent with national needs.

10.3.4 Change Management and Philosophy

The commercial practice of freezing the configuration baseline for testing and manufacturing is a more efficient approach than has been customary in the DOD. The DOD 5000 series guidance institutionalizes the current emphasis on concurrent engineering in the new Phase 2, engineering and manufacturing development phase, of the acquisition process. This means that the manufacturing design is to be accomplished up front, concurrently with the engineering design. This should help in minimizing the requirement for changes to the configuration to accommodate manufacturing problems discovered late in the program. The practice of authorizing low-rate initial production in Phase 2 should institutionalize testing of the production article prior to approval of full-scale production. The DOD will still have some prototype and production change requirements necessary to accommodate recommendations from development and operational tests.

The commercial and DOD emphasis on block modifications facilitates DOD requirements to stay abreast of the threat and emerging technology. Modification programs and their management should receive greater emphasis in the current and future fiscally constrained environment.

10.3.5 Schedule is Paramount

Past commitments to schedule in DOD programs have sometimes forced milestone reviews when system performance and configuration have not been adequately demonstrated in prototyping, testing, and manufacturing concepts. The philosophy now espoused in the DOD 5000 series is that programs will prototype early enough to demonstrate operational concepts, performance, and cost factors. The manufacturing design will be included with the system design in Phase 2 so that both can be tested prior to milestone reviews. Programs that cannot demonstrate through test and evaluation that they have achieved the required milestone exit criteria will not go to a milestone review and will slip schedule until they do. PMs are being encouraged to report required adjustments to baselines where appropriate, with rationale for the adjustment, so as to preclude potential baseline breaches and to maintain the Defense Acquisition Executive System (DAES) reporting as a meaningful management tool. The PM should not be held accountable for factors outside his control.

The new DOD emphasis is on schedules not driving decisions on programs. Programs will not be formally milestone-reviewed nor proceed to the next phase of development or production until they can demonstrate that they have accomplished their expected exit criteria.

10.3.6 Top Management Involvement in Programs

Successful major commercial acquisition programs are the product of unequivocal top-management approval and support. The Packard Commission and DMR recommendations on streamlined reporting and involvement at the top level of management have been implemented in the DOD. The new streamlined DOD acquisition reporting system (no more than three levels of reporting) is intended to promote top management involvement in DOD acquisition programs. This commercial practice was adopted by DOD through organizational realignment. It remains to be demonstrated whether the concept is workable in practice with the span of control limitations of a Service Acquisition Executive.

10.3.7 Program Management Authority and Control

In industry, program management authority is assigned to the line manager and is not diffused among functional managers. Past Government practices have clouded the authority lines with senior level functional staff members and advocates usually outranking the responsible program managers. The leverage traditionally exerted by staffs at all levels of the DOD acquisition process has forced line managers to conform in order not to impede their programs. Difficulties in granting relief from these and other regulatory pressures exerted by the staffs was particularly evident in the Defense Enterprise Program (DEP) implementation. Non-line managers and staffs at all levels refused to recognize or coordinate on programmatic exceptions to institutional procedures, even those formally excepted by Congress and the acquisition executive.

The Packard Commission and DMR recommendations have now been implemented in the DOD 5000 series guidance which clearly specifies that staffs provide independent assessments, advice, and assistance to decision makers. They can no longer hold programs hostage until their special interest requirements have been accommodated. To reinforce this concept, staffs have been and continue to be reduced at many levels as a result of the DMR. The new streamlined DOD acquisition reporting system is intended to assure that program managers have the requisite authority, commensurate with responsibility, to manage and control their programs, independent of staff interference and pressure. The challenge will now be to demonstrate that programs can be managed and controlled with the reduced staffs.

10.4 INHIBITORS TO GOVERNMENT ADOPTION OF THE COMMERCIAL APPROACH

10.4.1 Inhibitors

There are several inhibitors to adopting commercial program management practices:

- Formality of the Government Acquisition Process (#2)
- Specification Practices (#4)
- Inadequate Acquisition Training (#16)

The inhibitors are described in Appendix A.

10.4.2 Inhibitors-Commercial Practice Relationships

10.4.2.1 Formality of the Government Acquisition Process (#2)

The organization of the various levels of DOD and the Services, together with the policy defining acquisition practices, has constituted a barrier to proper top management involvement in acquisition programs and the proper allocation of authority and control of acquisition programs.

Effective program management requires free thinking and good judgement on the part of the program manager. The highly structured Government acquisition process provides little flexibility to the Government program manager to make trade-off decisions or explore innovative approaches, although he or she is encouraged to do so. In trying to promote fairness and equality in the Government acquisition process, the Government has imposed structure and formality which impedes adoption of commercial-like programmatic practices.

10.4.2.2 Specification Practices (#4)

Government preference for detailed product and process specifications, as listed in the DOD Index of Specifications and Standards, inhibits the program manager's ability to make schedule and performance trade-offs for the overall good of the program. Contractor innovation that could improve performance while maintaining cost and schedule is discouraged by this lack of flexibility.

10.4.2.3 Inadequate Acquisition Training (#16)

A lack of adequate training of Government procurement and contracting personnel at the program manager level fosters various levels of oversight in the acquisition organizational structure. The program manager should have trained and experienced acquisition management personnel assigned at the program office level with higher level staffs ensuring appropriate acquisition education, training, and career management. The Acquisition Workforce Improvement Act has institutionalized the requirement for training and career management of acquisition personnel. It is being implemented independently within each Service and should significantly minimize the effects of this inhibitor.

10.5 STRATEGY FOR ADOPTING THE COMMERCIAL APPROACH AND COPING WITH THE INHIBITORS

10.5.1 Planning, Budgeting and Enactment Practices

There is little that can be done to meaningfully change the congressional process that results in appropriated funds for DOD programs. By the nature of our society and constitution it is a free and open process where programs are generally expected to survive based on merit. DODD 5000.1 defines a disciplined approach to the integration of the requirements process, the PPBS process and the acquisition process. It requires long-range investment plans and affordability assessments in the context of these plans and defense planning guidance. The most successful and stable programs will be those that have a well defined need/requirement that is firmly supported

and advocated by the user community at all levels. It is essential to work with the user to establish this support. A program without user support will rarely survive.

A program must be perceived at all levels, including Congress, as being a well-managed program with a credible program manager and staff. The program must be perceived as being responsive to the user requirement within the boundaries of the established program baselines. When problems develop on programs that are beyond the control of the program manager it is essential that the PM be totally candid in taking action to resolve these problems and/or to get a recognized and approved change in the program baseline. Experience also demonstrates that programs that distribute development and production activity over a large cross section of states and congressional districts usually have broader support in Congress.

10.5.2 DOD Acquisition Process Practices

The DOD acquisition process is a long, cumbersome process which in itself detracts from short development and production schedules. The 1990-91 Acquisition Streamlining DSB study described at least 840 discrete activities accomplished in the life of a typical DOD program. Many of these activities are based in law, FAR or DFARS, or on sound management practices.

The entire DOD regulatory guidance for the acquisition process has been reviewed in accordance with the DMR direction, and the new DOD 5000 series is now in effect. The developers of the new guidance have made a dedicated effort to encourage the use of, and removal of barriers to, the various practices, including commercial practices, recommended by the Packard Commission, where possible. However, there have been few reductions in reporting or other requirements, and, in some cases, requirements have increased for programs lower than ACAT I.

The typical times allocated to the review process at DOD levels have been substantially streamlined in some cases. The multiple reporting and briefing layers have been removed or streamlined. PMs and PEOs should better be able to dedicate themselves to managing their programs under the new guidance, with the functions of intervening staffs better understood and minimized. PMs should use their time and staff expertise to efficiently tailor their program acquisition strategies in order to shorten schedules and minimize risk in achieving these schedules. At the same time, better management can result in better practices in achieving milestone exit criteria on time so that program reviews will not be delayed and the program destabilized.

The Packard Commission and DMR recommendations on streamlined reporting and involvement at the top level of management have now been implemented in the DOD. The new streamlined DOD acquisition reporting system with no more than three levels of reporting is intended to promote top management involvement in DOD acquisition programs.

The program manager and the PEO or equivalent have been given the requisite authority and control over their programs free of legitimate interference from staffs. The staffs are being reduced so that oversight will be minimized and interference must, by necessity, be on an exception basis. The PMs and PEOs must make it

work. Programs that are well-staffed and managed, with dedicated user support and priorities, will have an advantage in successfully implementing these practices.

10.6 RELATED PRACTICES

10.6.1 Contracting Practices

Less formal, more cooperative commercial contracting practices allow program managers the necessary flexibility to choose among various technical approaches, taking advantage of supplier relationships, best value factors, and through market research, new developments in the commercial marketplace.

10.6.2 Documentation and Specification Practices

Commercial buyer reliance on a supplier's standard development and production practices vice detailed military process specifications allows the commercial program manager to take advantage of supplier normal business processes, innovations and suggestions for improvement.

10.7 REFERENCES AND SOURCES

Bibliography and Reference Numbers: 21, 40, 41, 49, 66, 69

APPENDIX A

INHIBITORS DESCRIPTIONS

LIST OF INHIBITORS

1. Competition Practices
2. Formality of the Government Acquisition Process
   A. Contracting
   B. Planning and Budgeting
   C. Acquisition Management
3. Contract Clauses
   A. Government-Unique Clauses
   B. Multitudinous Clauses
   C. Flow Down of Contract Terms and Conditions
4. Specification Practices
5. Paperwork Requirements
   A. Certifications
   B. Reporting
   C. Records Retention
6. Data Rights
7. Data Deliverables
8. Favored Customer Status
9. Cost-Based Buy Decisions
10. Protest System/Process
11. Audit Rights
12. Quality Assurance, Quality Control, and Inspections
13. Warranties
14. Delays in Prompt Payment
15. Preference for New Development versus Nondevelopmental Items
16. Inadequate Acquisition Training

INTRODUCTION

Inhibitors can be considered generally as belonging to one of the following categories: the inhibitor forbids a commercial practice by the Government; the inhibitor is a Government right or mandatory activity (founded in law) which must either be modified or rescinded in order to adopt the commercial practice; or the inhibitor is a *usual* Government practice which interferes with or complicates the effective adoption of the commercial practice. The following paragraphs describe each inhibitor generically. The preceding commercial practices chapters describe how inhibitors specifically "discourage" adoption of commercial practices. The sequence of the inhibitors is not intended to imply a rank ordering or relative importance.

A.1 COMPETITION PRACTICES

Both the Government and commercial firms use competition, but their practices of it differ, especially regarding mandatory competition. The differences are founded in the basic nature of their roles in society and in the marketplace. For example, everyone has the right to sell to the Government, and there are numerous laws and regulations to ensure equal opportunity and fairness in the process. Absent justification to the contrary, Government buyers must use *full and open* competition with inevitable, sometimes frivolous, protests by losing offerors. In place of good judgment and common sense the Government acquisition process relies on detailed specifications to ensure fairness and to protect itself from protests. On the buying side of the relationship, everyone except the Government has a right to buy from anyone. There is no corresponding right for the Government. (77)

Although some Government practices are intended to increase competition by ensuring fairness and equal opportunity, they can also act as inhibitors to otherwise *good* commercial practices, such as those associated with establishing and maintaining good supplier relationships, cooperative relationships, long-term relationships, volume purchase agreements, and the use of criteria such as past performance/experience in placing orders and in determining the value of warranties. One result is that DOD is perceived as having little loyalty to suppliers and little interest in their long-term stability and strength.

Since the Government is normally required to use full and open competition, until recently it was difficult to use contract awards as a tool to motivate current contractor performance. Unlike commercial firms, the Government could not, for example, promote cooperation from vendors by using informal *control* methods such as placing an increasing portion of its orders with the most cooperative vendors. This resulted in Government contracting persons needing to rely more on formal contractual arrangements than did their commercial counterparts. (See Inhibitor #2, Formality of the Government Acquisition Process, below.)

The Competition in Contracting Act (CICA) is sometimes cited as a source for inhibiting effective competition. However, there is no unanimity or consensus on this point. Some contractor spokespersons, especially those from smaller companies, quickly point out they do not object to CICA and do not want

to see changes to it. Other spokespersons view CICA as an impediment and advocate recision or major changes. However, both groups voice complaints about the paperwork associated with CICA and how it's implemented and administered. (See Inhibitor #5, Paperwork Requirements, below.)

A.2 FORMALITY OF THE GOVERNMENT ACQUISITION PROCESS

A.2.1 Contracting

When the Government acquires an item from a commercial supplier, the contract developed is usually enormously detailed and complex compared with the usual commercial contract. Government buyers attempt to protect the Government from almost every contingency through the incorporation of voluminous contract clauses. They are intended to ensure that the Government receives a quality product at a fair price but are often inconsistent with standard commercial practices and the UCC. The added cost to the commercial supplier for complying with these clauses is passed on to the Government which then pays more than a commercial company would for the same or similar product.

The Government relies on formal, well defined contracting mechanisms to realize satisfactory contract performance instead of informal commercial practices such as withholding future business from uncooperative vendors. The resulting longer, more complex Government contract clauses encourage more formal contracts, literal contract enforcement, and a "work to the rule" attitude on the part of the seller. They also promote use of objective decision criteria for quality, testing, and acceptance standards and a relatively severe attitude toward enforcement. Together these practices tend to promote adversarial relationships instead of cooperation and teamwork.

These attitudes are also evident in resolving postaward contract issues. In the commercial sector, firms usually try to avoid litigation and resolve issues on the basis of fairness as opposed to the letter of the law. In contrast, the Government is more likely to pursue legal remedies than are commercial firms. The additional emotional burden associated with these noncommercial-type contractual arrangements often not only inhibits vendors from selling to the Government, but discourages Government adoption of commercial practices as well. The commercial practices of long-term commitments and relationships are also affected by this inhibitor. (Also see the Contract Clauses inhibitor below.)

A.2.2 Planning and Budgeting

Formality of the Government acquisition process also manifests itself internally in how Government and DOD acquisition programs are funded. The requirement of the executive and legislative branches of Government to formulate, present and enact a budget on an annual or biennial basis using the procedures of the PPBS process is an inhibitor to committing to program success and program stability. The formulation of the POM and budget decisions made by the DPRB (formerly DRB) have, in the past, overridden acquisition decisions resulting from the DAB or DSARC process or Service equivalents. Failure to consummate program decisions

with requisite funding obviates the decision, wastes time and money, and often leaves the program manger with nonexecutable programs. The instability of programs that have their funding regularly revised or in threat of revision has a deleterious impact on program planning and execution.

A.2.3 Acquisition Management

The DOD acquisition management and oversight practices themselves also act as inhibitors to adopting commercial-like practices such as primacy of schedule. The very complex procedures are designed to control acquisition programs to assure that the user requirements are being properly met within cost and schedule constraints. In the past, acquisition program managers have been driven by a requirement to meet a user-defined Initial Operating Capability (IOC) date. The IOC was a function of a requirement to meet a perceived threat capability that the system under development was supposed to defeat. This emphasis on schedule frequently caused programs to go to milestone reviews without ever having properly demonstrated, through development and operational testing, the configurations of hardware, software, or operational concepts that were required. Frequent practice was to approve transition of these systems to the next phase of development with conditions that were to be met in the next phase. This invariably caused concurrency problems and projected these problems downstream.

The new DOD 5000 series guidance has institutionalized the Packard Commission recommendations to perform early prototyping and demonstration of operational concepts. Under the new guidance, programs will not progress beyond the current milestone until they have properly demonstrated, through development and operational testing, the requisite exit criteria as specified in the Acquisition Decision Memorandum or lower level direction. The new DOD emphasis is designed to ensure that schedules do not drive decisions on programs. Programs will not be formally milestone reviewed nor proceed to the next phase of development/production until they can demonstrate that they have accomplished their expected exit criteria.

The Packard Commission and DMR recommendations on streamlined reporting and involvement at the top level of management have now been implemented in the DOD. The new streamlined DOD acquisition reporting system (no more than three levels of reporting) is intended to promote top management involvement in DOD acquisition programs. The practice of top management becoming more involved in acquisition programs has been adopted by DOD through organizational realignment.

A.3 CONTRACT CLAUSES

Some of the types and uses of contract clauses invoked in Government contracts differ from commercial practices and the use of the UCC. Additionally, DOD solicitations often contain unnecessary and burdensome provisions, and clauses are inconsistently applied. Taken together these practices not only represent a significant impediment to commercial vendors selling their products to the Government, but make it equally difficult for the Government to be more "commercial-like."

A.3.1 Government-Unique Clauses

The following types of *Government-unique* clauses were identified as having significant

potential impact as inhibitors. (71:8)

(a) Ethics
(b) National security
(c) Testing and quality assurance
(d) Audit and cost
(e) Letter contracts
(f) Availability of funds
(g) Bid bonds
(h) Government property or sources/work on Government installations
(i) Subcontracts
(j) Pre- and post-award disputes
(k) Miscellaneous

The following types of clauses were identified as inhibitors since they have the greatest *differences in content* with their commercial sector counterparts. (71:10)

(a) Price and payment terms
(b) Inspection, acceptance, and return of goods
(c) Warranties
(d) Limitation of liability
(e) Taxes
(f) Software and data rights
(g) Termination

A.3.2 Multitudinous Clauses

The flowdown of mandatory contract clauses, whereby each level in the procurement and contracting hierarchy adds required contract clauses to a procurement action (e.g., FAR, DFARS, and Service FAR Supplement), is a significant impediment, especially to the small supplier who has neither the staff nor the time to customize contracts for each procurement action. Another manifestation of too many clauses is that Government contracting people, with so many clauses to use, often invoke inappropriate clauses for a particular procurement action.

The commercial practice would be for a company to have one standard contract or a limited few standard contracts regardless of customer. According to one spokesperson, a standard form contract for commercial products would require only 15-20 clauses to comply with applicable statutes and executive orders. In contrast, under the interim DFARS Subpart 211.70 which is a DOD attempt at a standard form contract, a typical solicitation would require between 54 and 111 clauses and a typical contract between 37 and 78. The problem of multiple, conflicting contract clauses has prompted numerous recommendations to reduce the current proliferation of clauses.

A.3.3 Flow Down of Contract Terms and Conditions

In some instances, prime contractors are required by either law or regulation to flow down certain terms and conditions to subcontractors and suppliers. In other cases Government terms and conditions will be flowed down in order to ensure complete compliance with prime contractual requirements. In either case, compliance may be virtually impossible when sourcing decisions have already been made.

Usually, prior to a Government order or solicitation for a commercial item, the contractor has already made sourcing decisions. In many cases the contractor's procurement actions are also underway, using standard commercial arrangements to satisfy long-projected sales requirements. The supplier has no flexibility to change ongoing processes to procure or manufacture the commercial item in accordance with

Government-unique terms and conditions whether imposed directly or flowed down from a prime contractor.

Even when flow down is possible, it may not be practical, due to the disruption imposed on commercial production activities by the additional administrative burden of Government-unique requirements. The increased product and administrative costs would jeopardize the catalog or market price of the firm's commercial items, which are based on standard commercial practices and commercial delivery flow times. Thus, Government flow down requirements inhibit adoption of standard commercial practices and their attendant potential cost and schedule benefits. (77:344)

A.4 SPECIFICATION PRACTICES

The Government often imposes detailed standards on how an item should be developed. If a supplier wants to sell its product to the Government, it either requests a waiver from the standard or recreates its existing product according to Government requirements. This new product is then sold to the Government, usually at a higher price than the original commercial version.

Commercial suppliers produce products in response to the perceived needs of the marketplace, a process which has evolved naturally, honed by the competitive pressures of the marketplace rather than by artificial mandate. Government buyers, like their commercial counterparts, should, as much as possible, limit themselves to specifying what is to be supplied, not how to produce the *what*.

Use of standards should not be confused with the use of product specifications, which is a normal commercial practice. Many companies have very stringent product specifications that vendors must comply with, often more stringent than DOD specifications. But, as a general rule, buyers do not instruct their vendors on how to produce an item.

A.5 PAPERWORK REQUIREMENTS

The Government, for many varied reasons, requires more paperwork in conducting its operations than the commercial sector. Prominent examples are requirements for certifications, reporting, and record keeping. Taken together they represent a significant impediment to commercial practices, as well as barriers to vendors who might otherwise be suppliers to the Government.

A.5.1 Certifications

This inhibitor usually stems from legislated requirements for contractors doing business with the Government to provide proof of compliance with various laws. The required data is evidence/proof that the contractor is ethical and honest; is providing the DOD fair value at a fair price; and is not bribing Government officials. If the contractor processes a certification improperly, the Government can impose criminal, contractual, or other liability causing some contractor spokespersons to recommend a limitation of liability clause for such cases.

In other situations, the data are used to justify equality between consideration given and received in the contractual arrangement. An example of this is the requirement to provide cost or pricing data for commercial products. Commercial vendors are required to provide evidence of their product's commerciality in order to benefit from

statutes encouraging vendors to sell commercial products to the Government. These reporting requirements are a special burden to small firms without staffs to deal with the paperwork. They may also be a hinderance to products newly introduced in the marketplace that are without sufficient sales volume to qualify as "commercial" but that may be the most desirable as the latest state-of-the-art. Also affected are products nearing the end of their product life, whose sales volume is too low, but whose purchase may be necessary to maintain an existing system. There is no counterpart practice in the commercial marketplace, which relies instead on free market competitive pressures to set a fair price.

The important point is that any certification requirement will add cost to an acquisition since it increases contractor risk, requires special handling and record keeping, and is not a normal commercial practice. Some of the most often complained-about certifications are the following:

A.5.1.1 Truth in Negotiation Act (Cost or Pricing Data)

The concept of submitting cost or pricing data, as required by the Truth in Negotiation Act (10 USC 2306A with a threshold of $500,000), is unknown in the commercial marketplace. The catalog price exemption from submission of certified cost or pricing data is dependent upon a "sold in substantial quantities to the general public" standard. Newly developed items will not yet have developed the market share necessary to meet the "substantial quantities" standard. This inhibits the Government from acquiring new and innovative items as a commercial firm, not bound to this standard, would be able to do.

Data of the type, detail, and format required for submission of certified cost or pricing data are often not accumulated by commercial firms. Pricing in the private sector is not always based on cost, but rather is also influenced by market pressures, competition, and supply and demand. As a result, in many cases, even if the commercial firm wanted to provide the data, it would not be able to.

Additionally, even when the data are available, commercial firms treat cost or pricing data as competition sensitive, and do not provide it to customers. Many firms forgo Government business rather than submit such data. Alternatively, commercial price fairness is determined by the marketplace through competitive pressures and the law of supply and demand, not on the basis of data deliveries. In addition, the specter of false claims liability is a significant disincentive to contractors considering whether to do business with the Government. The record keeping required to refute such a claim is bothersome and often outweighs incentives to sell to the Government. (16) Finally, submission of cost or pricing data also acts as an inhibitor by leading to increased proposal preparation costs and by extending procurement leadtimes.

A.5.1.2 Lobbying

The Byrd Amendment to the 1990 Interior Department Appropriations Act forbids using Government funds to influence or attempt to influence any person involved with a contract in excess of $100,000. Contractors must certify that no public dollars were (are) used to lobby Government and must disclose where private funds are used to lobby. (83)

A.5.1.3 Socio-Economic Clause Compliance

There are numerous clauses that implement numerous public socioeconomic policies, ranging from the environment, to small business, and hiring. These clauses place restrictions on the contractor's business operations and performance of the contract. Most contractor representatives do not take issue with these clauses per se, but point out that such requirements impose a heavy paperwork burden and are not usually a consideration in doing business in the non-government sector.

A.5.2 Reporting

Reporting requirements are similar to certification requirements in having many Government reporting requirements which act as barriers and prevent the contractor from becoming more commercial-like. One example is found in the Conflicts of Interest in Defense Procurement Act, which requires annual reporting concerning compensation provided to certain former DOD employees.

A.5.3 Records Retention

As part of the paperwork burden associated with defense and Government contracting, records of data and submitted reports need to be accounted for and maintained for years.

A.6 DATA RIGHTS

One of the biggest concerns of vendors selling to the Government is Government actions that result in the release of technical data to competitors without reimbursement. Although this may not be an inhibitor to the Government in adopting commercial practices, it is a Government practice that is non-commercial-like and needs to be remedied if the Government is to become more commercial-like in its acquisition practices. For example, relaxation of this requirement would encourage more vendors to compete for Government business and, perhaps, result in better value for dollars expended. Today, vendors must decide whether to forgo bidding on a Government contract, work with the contracting office to remove the requirement, or risk release of competition-sensitive data which could jeopardize the company's survivability. One fix to the problem is a provision in DFARS 211 that provides for the Government to obtain only limited or restricted rights in technical data for commercial products.

A.7 DATA DELIVERABLES

Normal Government data ordering practices from the perspective of commercial companies are an inhibitor since the Government norm is not the norm in commercial practice, rather it represents additional or nonstandard data deliverables. In some instances, the Government requires/orders data from contractors under the mistaken belief that it will be needed to maintain an item. Another example of not thinking through data requirements is the reported imposition of Computer-Aided Acquisition and Logistics Support (CALS) requirements on contracts for commercial products. Its not likely that the Government will be able to support these items and will, therefore, not use the CALS data.

Government documentation requirements are much greater than in commercial practice. Frequently the Government requires ownership of all technical data associated with a product. The Government does not

wish to be dependent on the original manufacturer for replacement of the product and acquires the technical data that would enable a competitive reprocurement. In addition to the normal vendor-supplied manuals, the Government usually requires a detailed drawing package that would enable reprocurement of the product from another supplier. If software is involved, documents detailing the development methods, source code, and data dictionary are required. If repairs are to be made at the piece-part level, a more detailed maintenance manual will be required. These practices often result in documentation costs becoming a significant portion of the total overall acquisition cost of the program.

The suppliers who are in business to produce items, not data, are thereby discouraged from selling their otherwise acceptable product to the Government. The commercial practice is a form of standard or usual technical data supplied with products. The inhibitor is in the Government default practice of requiring strict military specification format for design data, manufacturing process data, and logistics support data, instead of first determining if what is already available is adequate.

A.8 FAVORED CUSTOMER STATUS

The Government often requires a "most favored customer" price although the Government does not act like a "most favored customer", that is, it cannot guarantee a long term relationship and it demands terms and conditions which are unlike those normally offered with the "most favored customer" price. For example, preferred customer rates are a prerequisite for a supplier to be listed on the GSA Multiple Award Schedule, even though the Government will not guarantee a minimum sales volume. This unfair requirement keeps qualified suppliers from wanting to do business with the Government, and is detrimental to the Government in the long run by inhibiting cooperative supplier relationships.

A.9 COST-BASED BUY DECISIONS

The Government considers cost as a factor in acquisition decisions more often than do commercial firms. Its concern is the cost to the buyer, an item's price, not the cost incurred by the seller, nor the seller's profit. The pressures of a competitive market set a fair price or value on an item usually as a function of supply and demand, independent of the cost to produce it or its profit margin. For the DOD, the "Armed Services Pricing Manual" on page 2-1 states that a procurement aim is to get a "fair and reasonable price(s) calculated to result in the lowest ultimate overall cost to the Government." The Government usually accomplishes this objective through price analysis, but also employs cost analysis in appropriate cases.

Discussion of Government contract pricing usually focuses on cost analysis, that is, on the requirement for the submission of cost or pricing data. Procurement of commercial products are often exempt from the cost or pricing data requirement, either because the products fall within the catalog or market price exemption or because the procurement involves adequate price competition. However, the determination that cost or pricing data need not be submitted does not end the analysis. Although a potential contractor may offer the Government a catalog or market price or a price that has otherwise been established through

competition, the Government does not have to accept that price. For example, the Government may still conclude, based on price analysis, that the offered price is not fair and reasonable. Other laws or regulations may apply, requiring "most favored customer" pricing or other restrictions affecting the price the Government will accept.

The Government's concern with cost, especially in major systems acquisitions, is also manifested in the use of cost-type contracts. Cost type contracts are used primarily for development efforts to provide a means to share the risks between the Government and contractors. Typically the Government sets the maximum amount of profit or fee a firm can charge for the item instead of relying on the competitive pressures of a free marketplace to set a price commensuate with cost, as well as risk, supply, demand, and other factors. Concentrating on the cost of an item and ignoring or discounting marketplace pricing mechanisms restricts Government flexibility in making acquisition decisions.

Price is the focus of buying decisions in the commercial sector. Negotiations are done on the basis of price, not cost. The seller, not the buyer, has access to an item's cost data. The Government's orientation toward cost not only inhibits vendors from selling to the Government, but also inhibits it from becoming more commercial-like in its practices.

A.10 PROTEST SYSTEM/PROCESS

Because everyone has the right to sell to the Government, it must go to great lengths to ensure the process for making awards is fair and unbiased. There is no counterpart to this situation in the commercial sector, because commercial buyers are free to choose any supplier for any reason, and unsuccessful suppliers cannot protest. The Government approach is necessary, but it is not a commercial practice and it introduces inefficiencies and delays. One result is that it is relatively easy for a losing-bid contractor to protest an award, thereby delaying start of work. In order to avoid lengthy and costly protests, contract awards may sometimes be made on a basis to minimize protests, that is, on the basis which is most easily defended, price; rather than on what may be best for the Government overall.

The legal right to protest Government contract awards is not the issue. This is not a right in the commercial sector, it is not a commercial practice, and it prevents adoption of some commercial contracting practices. Contract award protests in the Government sector often result in delays and work interruptions, which many commercial suppliers cannot tolerate due to loss of productivity, stop and start-up costs, and other factors. If everything else were equal, a supplier would rather proceed immediately with the work upon contract award, rather than do business with a customer whose award might signal delays and postponements in work start until all protests are resolved. The Government buyer should help ensure speedy resolution of protests and disputes and also ensure there are no unnecessary delays in the process.

A.11 AUDIT RIGHTS

One of the most frequently mentioned statutory impediments to adopting commercial practices is the Government's oversight rights, especially the right to

conduct audits of a contractor's internal records at the Government's discretion, as well as the right of the Government to visit a contractor at the Government's discretion. Most of the objections are to the audit rights associated with the Government acting as a customer, not those which accrue to the Government in their legal oversight and compliance roles, such as the audits conducted by the Internal Revenue Service (IRS), Environmental Protection Agency (EPA), Securities and Exchange Commission (SEC), etc. No commercial firm selling to commercial customers permits those customers to audit its internal records.

This is an area in which the nature and rights of the Government are barriers to becoming more commercial-like in its practices. The Government's rights, duties, and obligations are different from commercial firms, and the need to be effective management and operation of the Government must be reconciled with these responsibilities. The Government will not be able to adopt all commercial practices carte blanche.

A.12 QUALITY ASSURANCE, QUALITY CONTROL, AND INSPECTIONS

Government and DOD contractual inspection requirements burden proven suppliers (See Chapter #2, Best Value, and Chapter #3, Supplier Relationships) and differ from standard commercial practices. Specific FAR and DFARS clauses dictate how a supplier must conduct its quality assurance and quality control functions with Government inspections to ensure compliance. These clauses are routinely included in Government contracts to procure both developmental and nondevelopmental items. The current FAR and DFARS do permit reliance on supplier inspection systems, but the option is based on dollar value of the procurement, rather than quality history, criticality of the item, potential loss involved, or reliability factors such as likelihood of repair or replacement.

The required Government process is different than the supplier's standard business practice, and therefore causes problems. The supplier must incorporate different quality process requirements and incur additional costs which are then passed on to the Government, or request a waiver to the requirement, or simply decline doing business with the Government.

Not only are Government quality requirements themselves inhibitors to commercial practices, but so are the procedures and forms used in their implementation. Contractors would prefer that the Government rely on the contractor's inspection and quality assurance programs rather than specify its own requirements for such programs. Contractors would also prefer that the Government behave like their commercial customers and utilize existing commercial shipping and invoicing systems. In-process inspection, which is the usual practice on many Government contracts, is not a usual practice in the commercial sector. Commercial firms do not conduct in-process inspections of their supplier(s) during production. Inspections are done, if at all, at acceptance.

The DD Form 250, Material Inspection and Receiving Report, is a multi-use form for packing, receiving, shipping, quality, and inspection. It is an impediment in at least two important ways. First, unnecessary

delays are incurred in executing the quality and inspections portions, getting the required signatures. Second, invoicing and shipping portions are usually incompatible with commercial computerized systems. (The FAR/DFARS do not require use of the DD Form 250. The contracting officer can choose to accept a substitute in contractor format.)

A.13 WARRANTIES

The inhibitors to commercial-like warranty practices are in the FAR/DFARS warranty clauses that exceed those mandfated by 10 USC 2403. If the FAR warranty clauses were revised to be more in line with what commercial companies usually offer, DOD practice would be more commercial-like and the number of suppliers willing to do business with the Government might increase. Different warranties for the same product for each customer are too costly for a seller to administer. DOD warranty practices inhibit adoption of commercial warranty practices.

A.14 DELAYS IN PROMPT PAYMENT

Delays in prompt payment can result in a supplier incurring additional cost. The Government traditionally requires longer to process legitimate requests for payment than commercial businesses. It may take longer if there is a dispute or claim regarding payment which can go on to litigation instead of negotiation/mediation. Payment could possibly be delayed for years. These additional costs include those associated with processing requests for payment and the sunk costs and interest loss associated with the delivered goods. Consequently, there is a necessity for additional employee resources, and working capital. These factors force increased vendor reliance on borrowed money and reduce the productive use of scarce equity capital as cash flow problems become magnified, especially for small firms.

Several contractor representatives complained that the U.S. Government is notoriously slow in remitting prompt payment for goods and services delivered. Public Law 97-177, the Prompt Payment Act of 1982, provides incentives for the Government to pay its bills on time. Most terms are similar to those found in the commercial marketplace, with the exception of a 15 day grace period after the due date, 30 days after delivery, i.e., a total of 45 days. There are other problems associated with the procedures for payment, e.g., a certification before payment requirement resulting in an even longer payment cycle, repeated requests for interest payment necessitating additional employee resources, etc. These practices force increased vendor reliance on borrowed money, causing especially small ones, to potentially have cash flow problems and thereby encouraging them to sell to customers who remit promptly, without dispute.

A.15 PREFERENCE FOR NEW DEVELOPMENT VERSUS NONDEVELOPMENTAL ITEMS

The Government and DOD procurement regulations have a strong bias toward activities associated with developing new items to satisfy its needs. This has been a natural trend due in part to DOD procurement dollars being overwhelmingly associated with developing new systems and items for those systems. Procurement regulations have a great deal of guidance on how to manage the acquisition of to-be-

developed items and say little about acquiring existing nondevelopmental items (NDI).

Although there is sound justification for public guidance on developing new defense-unique products, the sheer volume of these programs has overshadowed the need for NDI acquisition guidance. Until recently there has been relatively little guidance for DOD buyers on how to differentiate between situations that require DOD-unique items and situations where existing products could be used. Often more detailed and costly requirements and safeguards associated with DOD-unique items have been imposed by default on existing products. This overburdens NDI acquisition, discourages vendors, and inhibits adoption of commercial practices. These are the obvious manifestations. More subtle ones which also need to be coped with are interwoven throughout the acquisition regulations.

A.16 INADEQUATE ACQUISITION TRAINING

Training/education is the single most important factor in bringing about the changes needed for DOD to become more commercial-like in its acquisition practices. Many Government practices which are different from corresponding commercial practices are due in large measure to a lack of understanding of the legislative intent in numerous laws and in overly restrictive interpretations of the law. These are compounded by succeeding levels of implementation down through the Government and DOD to the buying offices. There have been and are currently a number of reform initiatives which, when fully implemented, will result in DOD becoming more commercial-like in its acquisition practices. This will occur only after acquisition personnel at all levels have received the training they need in how to administer the new practices and in how to counter natural, culture-based, but erroneous perceptions about Government acquisition requirements. Government acquisition personnel need to receive adequate training in what is required, what is not required, and what are acceptable commercial practices in DOD acquisitions.

APPENDIX B

STATUTORY AND REGULATORY BACKGROUND

This appendix contains excerpts and descriptions of some of the statutory and regulatory bases for each identified inhibitor. They are included here as an aid to getting started in defining exactly how an inhibitor impedes a specific acquisition effort, thereby facilitating development of a coping strategy.

NOTE: The appendix was prepared as of April 1, 1991. It is NOT an all inclusive or exhaustive list.

B.1 COMPETITION PRACTICES

B.1.1 PL 98-369, The Competition in Contracting Act (CICA) of 1984

CICA amended 41 USC 253 and 10 USC 2304 to read as follows:

> "An executive agency in conducting a procurement for property or services shall obtain full and open competition through the use of competitive procedures; and shall use the competitive procedure or combination of competitive procedures that is best suited under the circumstances of the procurement."

B.1.2 10 USC 2301, Congressional Defense Procurement Policy

> "It is the policy of Congress that full and open competitive procedures shall be used by the Department of Defense."

B.1.3 FAR Part 6, Competition Requirements

Prescribes policies and procedures to promote full and open competition in the acquisition process and to provide for full and open competition, full and open competition after exclusion of sources, other than full and open competition, and competition advocates. As used in this part, full and open competition is the process by which all responsible offerors are allowed to compete.

B.2 FORMALITY OF THE GOVERNMENT ACQUISITION PROCESS

B.2.1 Contracting

(a) PL 101-189, National Defense Authorization Act for FY90 and FY91; Section 824, Acquisition of Commercial and Nondevelopmental Items

> "The Secretary of Defense shall develop a simplified uniform contract for the acquisition of commercial items by the Department of Defense and shall require that such simplified uniform contract be used for the acquisition of commercial items to the maximum extent practicable."

(b) Federal Acquisition Regulation (FAR)

The FAR contains 53 multi-part provisions and over 650 contract clauses regulating all aspects of Government acquisition.

(c) Department of Defense Federal Acquisition Regulation Supplement (DFARS)

The DFARS contains 53 multi-part provisions and over 400 contract clauses that regulate DOD acquisition practices in addition to the FAR.

B.2.2 Planning and Budgeting

DFARS Part 217.103-70, Funding of Multiyear Contract

> "The planning and coordination of multiyear acquisition strategies should begin sufficiently early to permit required integration of the acquisition into the Planning Programming and Budgeting System (PPBS). The degree of integration and the extent of data required will vary with the type and size of the program. Guidelines shall be included, as required, in DOD and Service instructions for preparing program objective memoranda (POM) submissions and budget estimates submissions (BES)."

B.2.3 Acquisition Management

(a) 10 USC 2301, Congressional Defense Procurement Policy

"It is the policy of Congress that the Department of Defense shall promote responsiveness of the procurement system to agency needs by simplifying and streamlining procurement processes."

(b) DFARS Part 207.103, Agency-Head Responsibilities

"The program manager, or other official responsible for the program concerned has overall responsibility for the requisite acquisition planning as this official has for all other planning for the program. . . . The head of the contracting activity, or the chief contracting official of the buying activity, in coordination with the program manager, must ensure that the objectives of the acquisition plan are realistic and achievable and that solicitations and contracts will be appropriately structured to equitably distribute technical, financial, and economic or business risks, consistent with the program phase of the acquisition, the technical requirements and needs of the specific program, and salient business and legal constraints. All personnel engaged in the management of the acquisition process, including program, technical and financial personnel, are essential to the comprehensive acquisition planning and preparations necessary to achieve the acquisition objectives. These personnel must be made cognizant of their responsibilities and actively participate in the development and preparation of the acquisition plan, if acquisition planning is to be successful."

B.3 CONTRACT CLAUSES

B.3.1 Government-Unique Clauses

FAR Part 52 and DFARS Part 252 contain the FAR and DFARS clauses. Examples of Government-unique clauses include FAR 52.203-13. Procurement Integrity--Service Contracting and DFAR 252.203-7001, Special Prohibition on Employment. Examples of Government clauses that are substantially different than their commercial counterparts include FAR 52.216-24, Limitation of Government Liability and DFARS 252.217-7309, Default.

B.3.2 Multitudinous Clauses

PL 101-189, National Defense Authorization Act for FY90 and FY91; Section 824, Acquisition of Commercial and Nondevelopmental Items

"The uniform contract (for the acquisition of commercial items) shall include only those contract clauses that are required to implement provisions of law applicable to such an acquisition and those contract clauses that are appropriate, as determined by the Secretary of Defense, for a contract for such an acquisition. In addition to these clauses, a contract for the acquisition of commercial items may include only such clauses as are essential for

the protection of the Federal Government's interest in the particular contract, as determined in writing by the contracting officer for such contract."

B.3.3 Flow Down of Contract Terms and Conditions

(a) 10 USC 2306a, Cost or Pricing Data: Truth in Negotiations

"An offeror for a subcontract (at any tier) shall be required to submit cost or pricing data before award of the subcontract if the price of the subcontract is expected to exceed $500,000 and the prime contractor and each higher-tier subcontractor have been required to make available cost or pricing data."

(b) DFARS Part 217.7402, Acquisition Requirements

"Contracts which contain Provisioning Procedures shall . . .
(3) Require a flow-down of the appropriate provisioning technical documentation requirement in subcontracts and purchase orders where the documentation is to be prepared by subcontractors; . . ."

(c) DFARS Part 245.505-14, Reports of Government Property

"The contractor's property control system shall provide annually a report of all DOD property for which the contractor is accountable. . . . The prime contractor shall flow this reporting requirement to include DOD property in the possession of subcontractors."

(d) DFARS Part 252.227-7037, Validation of Restrictive Markings on Technical Data

"The Contractor or subcontractor at any tier is responsible for maintaining records sufficient to justify the validity of its markings that impose restrictions on the Government and others to use, duplicate, or disclose technical data delivered . . . under the contract. . . . The contractor or subcontractor agrees to insert this clause in subcontracts at any tier requiring the delivery of technical data."

B.4 SPECIFICATION PRACTICES

B.4.1 10 USC 2301, Congressional Defense Procurement Policy

"It is the policy of Congress that the Department of Defense shall require descriptions of agency requirements, whenever practicable, in terms of functions to be performed or performance required."

B.4.2 10 USC 2305, Contracts: Planning, Solicitation, Evaluation, and Award Procedures

"The type of specifications included in a solicitation shall depend on the nature of the needs of the agency and the market available to satisfy such needs. Subject to such needs, specifications may be stated in terms of --
(i) function, so that a variety of products or services may qualify;
(ii) performance, including specifications of the range of acceptable characteristics or of the minimum acceptable standards; or
(iii) design requirements."

B.4.3 10 USC 2325, Preference for Nondevelopmental Items

"The Secretary of Defense shall ensure that, to the maximum extent practicable, requirements of the Department of Defense with respect to a procurement of supplies are stated in terms of--
(a) functions to be performed;
(b) performance required; or
(c) essential physical characteristics."

B.4.4 FAR Part 10, Specifications, Standards, and Other Purchase Descriptions

B.4.4.1 10.002, Policy

"(b) Acquisition policies and procedures shall require descriptions of agency requirements, whenever practical, to be stated in terms of functions to be performed or performance required."

B.4.4.2 10.004, Selecting Specifications or Descriptions for Use

"Plans, drawings, specifications, standards, or purchase descriptions for acquisitions shall state only the Government's actual minimum needs and describe the supplies and/or services in a manner designed to promote full and open competition."

B.4.4.3 10.006, Using Specifications and Standards

(a) "Mandatory specifications and standards"

(1) ". . . specifications and standards listed in the GSA Index of Federal Specifications, Standards and Commercial Item Descriptions are mandatory for use by all agencies requiring supplies or services covered by such specifications . . . ."

(2) "Military specifications and standards are mandatory for use by the Department of Defense (DOD), as are voluntary standards adopted by DOD and listed in the DODISS . . . ."

(b) "Commercial Exception"
". . . agencies should consider stating their needs in a purchase description, when appropriate under Part 11 and implementing regulations, even though there is an indexed specification."

B.4.5 DFARS Part 210, Specifications, Standards, and Other Purchase Descriptions

210.002, Policy

"Requirements that are not mandated by law or established DOD policy and that do not contribute to the operational effectiveness and suitability of the system, or effective management of its acquisition, operation, or support shall be excluded. . . . During all acquisition phases, solicitations and contracts shall state management requirements in terms of results needed rather than 'how-to-manage' procedures for achieving those results."

B.5 PAPERWORK REQUIREMENTS

B.5.1 Certifications

(a) 10 USC 2306a, Cost or Pricing Data: Truth in Negotiations

"An offeror for a prime contract shall be required to submit cost or pricing data before award of the contract if the price of the contract to the United States is expected to exceed $500,000. A person required, as an offeror, contractor, or subcontractor, to submit cost or pricing data shall be required to certify that, to the best of the person's knowledge and belief, the cost or pricing data submitted are accurate, complete, and current."

(b) FAR Part 52

Examples of contract clauses that require certifications include:

52.203-2, Certificate of Independent Price Determination
52.203-8, Requirement for Certificate of Procurement Integrity
52.203-12, Limitation on Payments to Influence Certain Federal Transactions
52.209-8, Organizational Conflicts of Interest Statement--Advisory and Assistance Services
52.215-32, Certification of Commercial Pricing for Parts or Components
52.222-21, Certification of Nonsegregated Facilities
52.223-1, Clean Air and Water Certification

(c) DFARS Part 252

Examples of contract clauses that require certifications include:

252.209-7000, Certification or Disclosure of Ownership or Control by a Foreign

Government that Supports Terrorism
252.223-7004, Hazardous Material Identification and Material Safety Data
252.223-7005, Notice of Radioactive Materials
252.227-7036, Certification of Technical Data Conformity
252.242-7003, Certification of Indirect Costs

B.5.2 Reporting

(a) FAR Part 52

Examples of contract clauses that require reports include:

52.222-37, Employment Reports on Special Disabled Veterans and Veterans of the Viet Nam Era
52.242-2, Production Progress Reports
52.242-12, Report of Shipment

(b) DFARS Part 252

Examples of contract clauses that require reports include:

252.203-7002, Statutory Compensation Prohibition and Reporting Requirements Relating to Certain Former DOD Employees
252.217-7238, Material Inspection and Receiving Report
252.227-7009, Reporting and Payment of Royalties
252.227-7039, Patents--Reporting of Subject Inventions
252.228-7006, Accident Reporting and Investigations Involving Aircraft, Missiles, and Space Launch Vehicles

B.5.3 Records Retention

FAR Part 4.7, Contractor Records Retention

4.703, Policy

". . . contractors shall make available books, records, documents, and other supporting evidence to satisfy contract negotiation, administration, and audit requirements of the contracting agencies and the Comptroller General for (1) 3 years after final payment or, for certain records, (2) the period specified in 4.705 through 4.705-3, whichever of these periods expires first."

B.6 DATA RIGHTS

B.6.1 10 USC 2305, Contracts: Planning, Solicitation, Evaluation, and Award Procedures

"In preparing a solicitation for the award of a production contract for a major system, the head of an agency shall consider requiring in the solicitation that an offeror include in its offer proposals to provide the United States the right to use technical data to be provided under the contract for competitive reprocurement of the item, together with the cost to the United States, if any, of acquiring such technical data and the right to use such data. Such proposals insure that the Unites States will be able to obtain on a competitive basis items procured in connection with the system that are likely to be reprocured in substantial quantities during the service life of the system."

"Whenever the head of an agency requires that proposals described (above) be submitted by an offeror in its offer, the offeror shall not be required to provide a proposal that enables the United States to acquire competitively in the future an identical item if the item was developed exclusively at private expense unless the head of the agency determines that-

(i) the original supplier of such item will be unable to satisfy program schedule or delivery requirements; or

(ii) proposals by the original supplier of such an item to meet the mobilization requirements are insufficient to meet the agency's mobilization needs."

B.6.2 10 USC 2320, Rights in Technical Data

"In the case of an item or process that is developed by a contractor or subcontractor exclusively with Federal funds, the United States shall have unlimited right to use technical data pertaining to the item or proc s, or release or disclose the technical data to persons outside the government or permit the use of the technical data by such persons."

"In the case of an item or process that is developed by a contractor or subcontractor exclusively at private expense, the contractor or subcontractor may restrict the right of the United States to release or disclose technical data pertaining to the item or process to persons outside the government or permit the use of the technical data by such persons."

"In the case of an item or process that is developed in part with Federal funds and in part at private expense, the respective rights of the United States and of the contractor or subcontractor in technical data pertaining to such item or process shall be established as early in the acquisition process as practicable and shall be based upon negotiations between the United States and the contractor."

B.6.3 41 USC 253d, Validation of Proprietary Data Restrictions

"A contract for property or services entered into by an executive agency which provides for the delivery of technical data, shall provide that--

(1) a contractor or subcontractor at any tier shall be prepared to furnish to the contracting officer a written justification for any restriction asserted by the contractor or subcontractor on the right of the United States to use such technical data; and
(2) the contracting officer may review the validity of any restriction asserted by the contractor or by a subcontractor under the contract on the right of the United States to use technical data furnished to the United States under the contract if the contracting officer determines that reasonable grounds exist to question the currently validity of the asserted restriction and that the continued adherence to the asserted restriction by the United States would make it impractical to procure the item competitively at a later time.

B.6.4 41 USC 418a, Rights in Technical Data

"Regulations shall provide that the United States may not require persons who have developed products or processes offered or to be offered for sale to the public as a condition for the procurement of such products or processes by the United States, to provide the United States technical data relating to the design, development, or manufacture of such products or processes (except for such data as may be necessary for the United States to operate and maintain the product or use the process if obtained by the United States as an element of performance under the contract)."

B.6.5 FAR Part 27.4, Rights in Data and Copyrights

(a) 27.402, Policy

". . . the Government recognizes that its contractors may have a legitimate proprietary interest. . . in data resulting from private investment. Protection of such data from unauthorized use and disclosure is necessary in order to prevent the compromise of such property right or economic interest, avoid jeopardizing the contractor's commercial position, and preclude impairment of the Government's ability to obtain access to or use of such data. The protection of such data by the Government is also necessary to encourage qualified contractors to participate in Government programs and apply innovative concepts to such programs. In light of the above considerations, in applying these policies, agencies shall strike a balance between the Government's need and the contractor's legitimate proprietary interest."

(b) 27.403, Data Rights--General

"All contracts that require data to be produced, furnished, acquired or specifically used in meeting contract performance requirements, must contain terms that delineate the respective rights and obligations of the Government and the contractor regarding the use, duplication, and disclosure of such data. . . ."

B.6.6 DFARS Part 227.472, Acquisition Policy for Technical Data and Rights in Technical Data

(a) 227.472-1, General

"The acquisition of technical data and the rights to use that data requires a balancing of competing interests. . . . The Government must make technical data widely available to increase competition, lower costs and provide for mobilization. . . . Technical data are required for training of personnel, overhaul and repair, cataloging, standardization, inspection and quality control, packaging and logistics operations. The Government needs to encourage delivery of data essential for military needs, even though that data would not customarily be disclosed in commercial practice. However, the Government has an interest in encouraging contractors to develop new technologies and to improve existing technologies to satisfy Government and commercial needs. To encourage contractors and subcontractors to expend resources in developing applications of these technologies, it may be appropriate to allow them to exclusively exploit the technology. Contractors can best be encouraged to develop items of military usefulness when their rights in such items are scrupulously protected."

(b) 227.472-3, Rights in Technical Data

"To encourage commercial utilization of technologies developed under Government contracts, the Government may agree to accept technical data subject to Government purpose license rights (GPLR). The Government shall retain the royalty-free right to use, duplicate, and disclose data for Government purposes only and to permit others to do so for Government purposes only for a stated period of time."

B.7 DATA DELIVERABLES

B.7.1 FAR Part 52.227-16, Additional Data Requirements

"In addition to the data (as defined in the clause at 52.227-14, Rights in Data--General) specified elsewhere in this contract to be delivered, the Contracting Officer may, at any time during contract performance or within a period of 3 years after acceptance of all items to be delivered under this contract, order any data first produced or specifically used in the performance of this contract."

B.7.2 DFARS Part 252.227-7031, Data Requirements

"The contractor is required to deliver only the data items listed on the DD Form 1423 (Contract Data Requirements List) and data items identified in and deliverable under any contract clause of FAR Part 52.2 and DFAR Part 252.2 made a part of the contract."

B.8 FAVORED CUSTOMER STATUS

B.8.1 10 USC 2323, Commercial Pricing for Spare or Repair Parts

"If the head of an agency, using procedures other than competitive procedures, enters into a contract with a contractor for the purchase of spare or repair parts which the contractor also offers for sale to the general public, the price charged the United States for such parts under the contract may not exceed the lowest commercial price charged by the contractor in sales of such parts."

B.8.2 41 USC 253e, Commercial Pricing for Supplies

"A person who submits an offer to an executive agency for the supply of items that it offers for sale to the public (1) shall certify in the offer that the price offered is not more than its lowest commercial price for the items, or (2) shall submit with the offer a written statement specifying the amount of the difference between its lowest commercial price for the items and the price offered, and providing justification for that difference."

"This section does not apply to a contract if the contracting officer determines that the use of the price otherwise required is not appropriate because of differences in quantities, quality, delivery, or other terms and conditions of the contract from commercial contract terms."

B.8.3 FAR Part 15.813, Commercial Pricing Certificates

(a) 15.813-3, Policy

"Contracts entered into using other than full and open competition may not result in prices for parts or components . . . offered for sale to the general public that exceed the contractor's lowest commercial prices for such parts or components unless the price difference is clearly justified by the seller or the contracting officer has determined to exempt the contractor from the requirement. . . . Because the forces of the competitive marketplace usually ensure that the Government does not pay an too high a price for commercial parts or components, commercial pricing certificates are necessary only when these forces are not present in a particular contract action."

(b) 15.813-5, Exemption From the Requirement to Submit Commercial Pricing Certificates

"A contract is exempt from the requirement that a commercial pricing certificate be submitted if . . . . the contracting officer determines that obtaining the commercial pricing certificate is not appropriate because of . . . significant differences between the terms of the commercial sales of the parts or components to be acquired under the contract and the terms of the contract, including differences in quantity, quality, delivery requirements, or other terms and conditions."

B.8.4 FAR Part 52.215-32, Certification of Commercial Pricing for Parts or Components

"(b) Submission requirements. The Offeror/Contractor shall execute and submit to the Contracting Officer the following certificate with any offer/proposal . . . when requested by the Contracting Officer: . . . .
(1) . . . by submission of this offer/proposal, the Offeror/Contractor certifies that, to the best of its knowledge and belief, the prices offered for those parts or components . . . that the Contractor offers for sale are no higher than the lowest commercial price at which such items were sold to the public. . . .
(2) All parts or components for which prices offered are higher than the lowest commercial price . . . are identified . . . (including the amounts by which such offered prices are higher) and a written justification for the differences is attached. . . .
(d) Price reduction. If any price, including profit or fee negotiated in connection with this contract, or any cost reimbursable under this contract, has increased because of the certification. . ., or [if] the information provided as justification in. . . the certificate was inaccurate, incomplete, or misleading, the price or cost shall be reduced accordingly and the contract shall be modified to reflect the reduction."

B.9 COST-BASED BUY DECISIONS

B.9.1 10 USC 2306a, Cost or Pricing Data: Truth in Negotitations

"An offeror for a prime contract shall be required to submit cost or pricing data before award of the contract if the price of the contract to the United States is expected to exceed $500, 000."

B.9.2 FAR Part 15, Contracting by Negotiation

15.805 Proposal Analysis, 15.805-1 General

"When cost or pricing data are required, the contracting officer shall make a cost analysis to evaluate the reasonableness of individual cost elements. In addition, the contracting officer should make a price analysis to ensure that the overall price offered is fair and reasonable. When cost or pricing data are not required, the contracting officer shall make a price analysis to ensure that the overall price offered is fair and reasonable.

B.9.3 DFARS Part 215, Contracting by Negotiation

215.805-70 Cost Realism Analysis

"Even when adequate price competition exists, it may be appropriate to perform a cost realism analysis . . . to ensure that there is a reasonable expectation that the proposed costs are consistent with the technical proposal. . . ."

215.9 Profit, 215.902 Policy

"A profit analysis shall not be performed on contract actions to be awarded on the basis of adequate price competition. . . ."

B.10 PROTEST SYSTEM/PROTEST

B.10.1 31 USC 3553, Review of Protests; Effect on Contracts Pending Decision

"A contract may not be awarded in any procurement after the Federal agency has received notice of a protest with respect to such procurement from the Comptroller General and while the protest is pending, unless urgent and compelling circumstances which significantly affect the interests of the United States will not permit waiting for the decision of the Comptroller General and the Comptroller General is advised of that finding."

B.10.2 FAR 33.1, Protests

(a) 33.102, General

"(a) Contracting officers shall consider all protests, whether submitted before or after award and whether filed directly with the agency, the General Accounting Office (GAO), or for automatic data processing acquisitions under 40 U.S.C. 759 (hereinafter cited as "ADP contracts"), the General Services Board of Contract Appeals (GSBCA). The protestor shall be notified in writing of the final decision of the protest."

"(c) An interested party wishing to protest --
(1) is encouraged to seek resolution within the agency (see 33.103) before filing a protest with the GAO or GSBCA; . . ."

(b) 33.103, Protests to the Agency

"(a) (2) When a protest is filed only with the agency, an award shall not be made until a decision on the agency's protest is issued, or the matter is otherwise resolved unless the contracting officer or other designated official first determines, in writing, that one of the following applies:
(i) The supplies or services to be contracted for are urgently required.
(ii) Delivery or performance will be unduly delayed by failure to make award promptly.
(iii) A prompt award will otherwise be advantageous to the Government."

"(a) (4) Protests received after award filed only with the agency shall be handled in accordance with agency procedures. The contracting officer need not suspend contract performance or terminate the awarded contract unless it appears likely that an award may be invalidated and a delay in receiving the supplies or services is not prejudicial to the Government's interest. . . ."

B.11 AUDIT RIGHTS

B.11.1 10 USC 2306a, Cost or Pricing Data: Truth in Negotiations

(f) Right of the United States to Examine Contractor Records:

"For the purpose of evaluating accuracy, completeness, and currency of cost or pricing data required to be submitted by this section with respect to a contract or subcontract, the head of an agency, acting through any authorized representative of the head of the agency who is an employee of the United States or a member of the armed forces, shall have the right to examine all records of the contractor or subcontractor related to--
(A) the proposal for the contract or subcontract;
(B) the discussions conducted on the proposal;
(C) pricing of the contract or subcontract; or
(D) performance of the contract or subcontract."

B.11.2 10 USC 2313, Examination of Books and Records of Contractor

"An agency is entitled, through an authorized representative, to inspect the plant and audit the books and records of--
(1) a contractor performing a cost or cost-plus-a-fixed-fee contract made by that agency; and
(2) a subcontractor performing any subcontract performing under a cost or cost-plus-a-fixed-fee contract made by that agency."

B.11.3 41 USC 254, Contract Requirements

"All contracts awarded after using other than sealed bid procedures shall include a clause to the effect that the Comptroller General of the United States or any of his duly authorized representatives shall until the expiration of three years after final payment have access to and the right to examine any directly pertinent books, documents, papers, and records of the contractor or any of his subcontractors engaged in the performance of and involving transactions related to such contracts or subcontracts."

B.11.4 FAR Part 52.215-2, Audit--Negotiation

". . . the contractor shall maintain--and the Contracting Officer or representatives of the Contracting Officer shall have the right to examine and audit--books, records, documents, and other evidence and accounting procedures and practices, regardless of form . . . or type. . ., sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred in performing this contract. This right of examinations shall include inspection at all reasonable times of the Contractor's plants, or parts of them, engaged in performing the contract. . . . The Contractor shall make available at its office at all

reasonable times the materials described . . . above for examination, audit, or reproduction, until 3 years after final payment under this contract."

B.11.5 DFARS Part 215.874, Follow-Up on Contract Audit Reports

"It is the policy of the Department of Defense for contracting officers to make the best possible use of contract audit advice."

B.11.6 DFARS Part 242.7005, DCAA Auditor Responsibility

"DCAA audit offices are responsible for performing all necessary contract audit for DOD and providing accounting financial advisory service regarding contracts and subcontracts to all DOD components responsible for procurement and contract administration. The auditor is responsible for submitting information and advice based on his analysis of the contractor's financial and accounting records or other related data as to the acceptability of the contractor's incurred and estimated costs, as well as for reviewing the financial and accounting aspects of the contractor's cost control systems. The auditor is also responsible for performing that part of reviews and such analysis which requires access to the contractor's financial and accounting records supporting proposed cost or pricing data."

B.12 QUALITY ASSURANCE, QUALITY CONTROL, AND INSPECTIONS

B.12.1 PL 101-189, National Defense Authorization Act for FY90 and FY91; Section 824, Acquisition of Commercial and Nondevelopmental Items

"The Secretary of Defense shall require the use, in appropriate circumstances, of a modified inspection clause with streamlined inspection procedures in each Department of Defense contract for the acquisition of commercial items awarded to a contractor that (A) has a proven record of high quality production, and (B) offers an appropriate warranty to protect the Federal Government's interest in acquiring a high quality product."

B.12.2 FAR Part 46, Quality Assurance

(a) 46.102, Policy

"Agencies shall ensure that--
(a) Contracts include inspection and other quality requirements, including warranty clauses when appropriate, that are determined necessary to protect the Government's interest; ...
(c) Government contract quality assurance is conducted before acceptance, by or under the direction of Government personnel; and
(d) No contract precludes the Government from performing inspections. . . "

(b) 46.201, General

"The contracting officer shall include in the solicitation and contract the appropriate quality requirements. The type and extent of contract quality requirements needed depends on the particular acquisition and may range from inspection at time of acceptance to a requirement for the contractor's implementation of a comprehensive program for controlling quality. . . . The contracting officer may . . . authorize contractor-recommended alternatives when in the Government's interest and approved by the activity responsible for technical requirements."

(c) 46.202-2, Standard Inspection Requirements

"Standard inspection requirements . . . require the contractor to provide and maintain an inspection system that is acceptable to the Government; . . . give the Government the right to make inspections and tests while work is in process; and . . . require the contractor to keep complete, and make available to the Government, records of its inspection work."

(d) 46.401, Government Contract Quality Assurance--General

"Government contract quality assurance shall be performed at such times (including any stage of manufacture or performance of services) and places . . . as may be necessary to determine that the supplies or services conform to contract requirements."

(e) 46.407, Nonconforming Supplies or Services

"Contracting officers should reject supplies or services not conforming in all respects to contract requirements. . . . In those instances where deviation from this policy is found to be in the Government's interest, such supplies or services may be accepted. . . . Contractors ordinarily shall be given an opportunity to correct or replace nonconforming supplies or services when this can be accomplished within the required delivery schedule."

B.12.3 DFARS Part 246, Quality Assurance

246.102, Policy

"The Departments shall develop and manage a cost effective quality program to assure that all services provided and products designed, developed, purchased, produced, stored, distributed, operated, maintained, or disposed of, by contractors for the Department of Defense, conform to specified requirements. . . . The Departments will plan and implement a quality program as an integral part of all phases of the acquisition and support process, and will conduct quality audits to assure the attainment of quality products and services. . . . Contractors shall be provided maximum flexibility in establishing efficient and effective quality programs within specified contractual requirements."

B.13 WARRANTIES

B.13.1 PL 101-189, National Defense Authorization Act for FY90 and FY91; Section 824, Acquisition of Commercial and Nondevelopmental Items

"The Secretary of Defense shall require the use, in appropriate circumstances, of standard commercial warranties in each Department of Defense contract for the acquisition of commercial items."

B.13.2 10 USC 2403, Major Weapon Systems: Contractor Guarantees

(a) In this legislation, weapon system was defined as follows:
"(a) (1) ...items that can be used directly by the armed forces to carry out combat missions and that cost more than $100,000 or for which the eventual total procurement cost is more than $10,000,000. Such term does not include commercial items sold in substantial quantities to the general public."

(b) All contracts for the production of weapon systems must include warranties stating that the products delivered will be free from defects, and that the contractor will take corrective action when necessary. It also allows for waiver, modification, and negotiation of the warranty requirement.

B.13.3 FAR Part 46

(a) 46.703, Criteria for Use of Warranties

"The use of warranties is not mandatory."

(b) 46.709, Warranties of Commercial Items

"The Government may adopt the contractor's standard commercial warranty if the contracting officer determines it is not inconsistent with the rights that would be afforded the Government under a warranty of supplies clause . . . or other terms of the contract."

B.13.4 FAR Clauses

(a) 52.246-17 I, Warranty of Supplies of a Non-Complex Nature -- Alternate I

The contracting officer may include this clause or one substantially like it if a non-complex commercial item is to be acquired.

(b) 52.246-18 I, Warranty of Supplies of a Complex Nature -- Alternate I

The contracting officer may include this clause or one substantially like it if a complex commercial item is to be acquired.

(c) 52.246-19, Warranty of Systems and Equipment Under Performance Specifications or Design Criteria

The contracting officer may include this clause or one substantially like it in solicitations and contracts when performance specifications or design are of major importance.

B.13.5 DFARS Subpart 46.7, Warranties

Provides guidance and clauses for warranties of technical data.

(a) 246.703, Criteria for Use of Waranties

"The use of warranties in the procurement of weapon systems is mandatory pursuant to 10 USC 2403, unless a waiver is authorized. . . . Acquisition of warranties in the procurement of supplies that do not meet the definition of a weapon system (e.g., spare, repair, or replenishment parts) is governed by FAR 46.7."

(b) 246.770-1, Definitions

This definition expands on the one in USC 2403 to replace "items" with "a system or major subsystem used directly ..." It also adds exclusions to the definition. "This term does not include related support equipment, such as ground-handling equipment, training devices and accessories thereto; or ammunition, unless an effective warranty for the weapon system would require inclusion of such items."

B.14 DELAYS IN PROMPT PAYMENT

B.14.1 FAR Part 32.9, Prompt Payment

(a) 32.903, Policy

"All solicitations and contracts subject to this subpart shall specify payment procedures, payment due dates, and interest penalties for late invoice payment. Invoice payments and contract financing payments will be made by the Government as close as possible to . . ., but not later than [,] the due dates specified in the contract. . . . Payment will be based on receipt of a proper invoice or contract financing request and satisfactory contract performance. . . . When appropriate, Government contracts should allow the contractor to be paid for partial deliveries that have been accepted by the Government. . . . Discounts for prompt payment offered by the contractor shall be taken only when payments are made within the discount period specified by the contractor. Agencies shall pay an interest

penalty, without request from the contractor, for late invoice payments or improperly taken discounts for prompt payment. . . . The temporary unavailability of funds to make a timely payment does not relieve the obligation to pay interest penalties."

(b) 32.904, Responsibilities

"Agency heads shall establish the policies and procedures necessary to implement this subpart. Agency heads are authorized to prescribe additional standards for establishing due dates on invoice payments . . . and contract financing payments . . ., as deemed necessary to support agency programs and foster prompt payment to contractors."

B.14.2 FAR Part 52.232-25, Prompt Payment

Contract clause outlining Government terms and conditions for payment of contractor invoices. Specific terms include a payment due date of 30 days after receipt of invoice or government acceptance of supplies, and interest penalties accruing beginning the first day after the due date.

B.15 PREFERENCE FOR NEW DEVELOPMENT VERSUS NONDEVELOPMENTAL ITEMS (NDI)

B.15.1 10 USC 2301, Congressional Defense Procurement Policy

"It is the policy of Congress that the Department of Defense shall promote the use of commercial products whenever practical."

B.15.2 10 USC 2305, Contracts: Planning, Solicitation, Evaluation, and Award Procedures

"In preparing a solicitation for the award of a development contract for a major system, the head of an agency shall consider requiring in the solicitation that an offeror include in its offer proposals to incorporate in the design of the major system items which are currently available within the supply system of the Federal agency responsible for the major system, available elsewhere in the national supply system, or commercially available from more than one source."

B.15.3 10 USC 2325, Preference for Nondevelopmental Items

"The Secretary of Defense shall ensure that to the maximum extent practicable requirements of the Department of Defense are defined so that nondevelopmental items may be procured to fulfill such requirements, and such requirements are fulfilled through the procurement of nondevelopmental items.

B.15.4 FAR Part 11, Acquisition and Distribution of Commercial Products

(a) 11.002, Policy

"In a manner consistent with statutes, Executive Orders, and the requirements of Part 6 regarding competition, agencies shall acquire commercial products and use commercial distribution systems whenever these products or distribution systems adequately satisfy the Government's needs. . . ."

(b) 11.005, Acceptability

"The acceptability of commercial products to meet Government needs depends upon reliability, performance, logistics support requirements, and cost, among other things."

B.15.5 DFARS Part 210, Specifications, Standards, and Other Purchase Descriptions

210.002, Policy

"Pursuant to 10 USC 2325, it is the policy of the Department of Defense to fulfill requirements for items of supply through the acquisition of nondevelopmental items to the maximum practicable extent."

B.15.6 DFARS Part 211, Acquisition and Distribution of Commercial Products

211.7002, Policy

"It is Department of Defense policy to:
(a) Satisfy its requirements, to the maximum extent practicable, through competitive acquisition of commercial items." (See Appendix D.)

B.16 INADEQUATE ACQUISITION TRAINING

B.16.1 PL 98-369, The Competition in Contracting Act (CICA) of 1984

CICA amended 10 USC 2301 to read as follows:

"It is the policy of Congress that the head of an agency encourage the development and maintenance of a procurement career management program to ensure a professional procurement work force."

B.16.2 PL 101-189, National Defense Authorization Act for FY90 and FY91; Section 824, Acquisition of Commercial and Nondevelopmental Items

"The Secretary of Defense shall establish a program for training contracting officers, program managers, and other appropriate acquisition personnel in the acquisition of nondevelopmental items."

B.16.3 Defense Acquisition Workforce Improvement Act, as included in the FY91 Defense Authorization Act

"The Secretary of Defense shall establish policies and procedures for the effective management (including accession, education, training, and career development) of persons serving in acquisition positions in the Department of Defense."

B.16.4 10 USC 2317, Encouragement of Competition and Cost Savings

"The Secretary of Defense shall establish procedures to ensure that personnel appraisal systems of the Department of Defense give appropriate recognition to efforts to increase competition and achieve cost savings in areas relating to contracts."

APPENDIX C

CROSS REFERENCES

Appendix C contains cross references of commercial practices, inhibitors, and sources of inhibitors. There are two cross reference matrices. One cross references commercial practices to inhibitors and the other commercial practices to each other. Following the matrices is an index of the statutory and regulatory bases for the inhibitors, grouped by inhibitor.

C.1 COMMERCIAL PRACTICE/INHIBITORS MATRIX

In the first matrix commercial practices are the rows and inhibitors are the columns. When the matrix is read by row (commercial practice), a cell with an "X" indicates that an inhibitor applies to that commercial practice. When the matrix is read by column (inhibitor), a cell with an "X" indicates the commercial practice is impeded by the inhibitor. The indicated relationships are discussed in the respective chapters.

C.2 COMMERCIAL PRACTICES CROSS REFERENCE MATRIX

The second matrix cross references commercial practices to each other, showing their inter-relationships. Both vertical and horizontal axes, columns and rows, are the same. An "X" in a cell indicates a relationship between two commercial practices that is discussed in the respective chapters.

C.3 INHIBITORS/STATUTORY AND REGULATORY BASES INDEX

This index is derived from Appendix B. It conveniently lists by appropriate reference number some of the associated statutory and regulatory bases for each of the sixteen identified inhibitors.

COMMERCIAL PRACTICE/INHIBITORS MATRIX

	INHIBITORS															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Market Research and Surveys	X			X					X						X	X
2. Best Value	X	X		X	X	X							X			
3. Supplier Relationships	X	X				X		X		X				X	X	X
4. Contracting Practices		X	X	X			X	X	X	X		X	X			X
5. Documentation and Specification Practices	X			X			X			X		X			X	
6. Warranties		X	X										X			
7. Inventory Management and Commercial Distribution Systems	X	X			X			X				X	X			
8. Nondevelopmental Items				X	X	X					X				X	
9. Programmatic Practices		X		X												X

Key to Inhibitors:

1. Competition Practices
2. Formality of the Government Acquisition Process
3. Contract Clauses
4. Specification Practices
5. Paperwork Requirements
6. Data Rights
7. Data Deliverables
8. Favored Customer Status
9. Cost-Based Buy Decisions
10. Protest System/Process
11. Audit Rights
12. Quality Assurance, Quality Control, and Inspections
13. Warranties
14. Delays in Prompt Payment
15. Preference for New Development vs. NDI
16. Inadequate Acquisition Training

COMMERCIAL PRACTICE TO COMMERCIAL PRACTICE MATRIX

	COMMERCIAL PRACTICES								
	1	2	3	4	5	6	7	8	9
1. Market Research and Surveys		X	X	X	X		X	X	
2. Best Value	X		X	X		X	X		
3. Supplier Relationships	X	X		X		X	X	X	
4. Contracting Practices	X	X	X		X	X	X		X
5. Documentation and Specification Practices	X			X				X	X
6. Warranties		X	X	X				X	
7. Inventory Management and Commercial Distribution Systems	X	X	X	X				X	
8. Nondevelopmental Items (NDI)	X		X		X	X	X		
9. Programmatic Issues				X	X				

Table C-2

C.3 INHIBITORS/STATUTORY AND REGULATORY BASES INDEX

NOTE: This index was prepared as of April 1, 1991. It is NOT all inclusive or exhaustive.

C.3.1 Competition Practices

1. PL 98-369, The Competition in Contracting Act (CICA) of 1984

2. 10 USC 2301, Congressional Defense Procurement Policy

3. FAR Part 6, Competition Requirements

C.3.2 Formality of the Government Acquisition Process

1. Contracting
   a. PL 101-189, National Defense Authorization Act for FY90 and FY91; Section 824, Acquisition of Commercial and Nondevelopmental Items
   b. Federal Acquisition Regulation (FAR)
   c. Department of Defense Federal Acquisition Regulation Supplement (DFARS)

2. Planning and Budgeting
   DFARS Part 217.103-70, Funding of Multiyear Contract

3. Acquisition Management
   a. 10 USC 2301, Congressional Defense Procurement Policy
   b. DFARS Part 207.103, Agency-Head Responsibilities

C.3.3 Contract Clauses

1. Government-Unique Clauses
   FAR Part 52, DFARS Part 252

2. Multitudinous Clauses
   PL 101-189, National Defense Authorization Act for FY90 and FY91
   Section 824, Acquisition of Commercial and Nondevelopmental Items

3. Flow Down of Contract Terms and Conditions
   a. 10 USC 2306a, Cost or Pricing Data: Truth in Negotiations
   b. DFARS Part 217.7402, Acquisition Requirements
   c. DFARS Part 245.505-14, Reports of Government Property
   d. DFARS Part 252.227-7037, Validation of Restrictive Markings on Technical Data

C.3.4 Specification Practices

1. 10 USC 2301, Congressional Defense Procurement Policy

2. 10 USC 2305, Contracts: Planning, Solicitation, Evaluation, and Award Procedures

3. 10 USC 2325, Preference for Nondevelopmental Items

4. FAR Part 10, Specifications, Standards, and Other Purchase Descriptions
   10.002, Policy
   10.004, Selecting Specifications or Descriptions for Use
   10.006, Using Specifications and Standards

5. DFARS Part 210, Specifications, Standards, and Other Purchase Descriptions

C.3.5 Paperwork Requirements

1. Certifications
   a. 10 USC 2306a, Cost or Pricing Data: Truth in Negotiations
   b. FAR Part 52
      52.203-2, Certificate of Independent Price Determination
      52.203-8, Requirement for Certificate of Procurement Integrity
      52.203-12, Limitation on Payments to Influence Certain Federal Transactions
      52.209-8, Organizational Conflicts of Interest Statement--Advisory and Assistance Services
      52.215-32, Certification of Commercial Pricing for Parts or Components
      52.222-21, Certification of Nonsegregated Facilities
      52.223-1, Clean Air and Water Certification
   c. DFARS Part 252
      252.209-7000, Certification or Disclosure of Ownership or Control by a Foreign Government that Supports Terrorism
      252.223-7004, Hazardous Material Identification and Material Safety Data
      252.223-7005, Notice of Radioactive Materials
      252.227-7036, Certification of Technical Data Conformity
      252.242-7003, Certification of Indirect Costs

2. Reporting
   a. FAR Part 52
      52.222-37, Employment Reports on Special Disabled Veterans and Veterans of the VietNam Era
      52.242-2, Production Progress Reports
      52.242-13, Report of Shipment

b. DFARS Part 252
252.203-7002, Statutory Compensation Prohibition and Reporting Requirements Relating to Certain Former DOD Employees
252.217-7238, Material Inspection and Receiving Report
252.227-7009, Reporting and Payment of Royalties
252.227-7039, Patents--Reporting of Subject Inventions
252.228-7006, Accident Reporting and Investigations Involving Aircraft, Missiles, and Space Launch Vehicles

3. Records Retention
FAR Part 4.7, Contractor Records Retention (4.703, Policy)

C.3.6 Data Rights

1. 10 USC 2305, Contracts: Planning, Solicitation, Evaluation, and Award Procedures

2. 10 USC 2320, Rights in Technical Data

3. 41 USC 253d, Validation of Proprietary Data Restrictions

4. 41 USC 418a, Rights in Technical Data

5. FAR Part 27.4, Rights in Data and Copyrights
   a. 27.402, Policy
   b. 27.403, Data Rights--General

6. DFARS Part 227.472, Acquisition Policy for Technical Data and Rights in Technical Data
   a. 227.472-1, General
   b. 227.472-3, Rights in Technical Data

C.3.7 Data Deliverables

1. FAR Part 52.227-16, Additional Data Requirements

2. DFARS Part 252.227-7031, Data Requirements

C.3.8 Favored Customer Status

1. 10 USC 2323, Commercial Pricing for Spare or Repair Parts

2. 41 USC 253e, Commercial Pricing for Supplies

3. FAR Part 15.813, Commercial Pricing Certificates
   a. 15.813-3, Policy
   b. 15.813-5, Exemption From the Requirement to Submit Commercial Pricing Certificates

4. FAR Part 52.215-32, Certification of Commercial Pricing for Parts or Components

C.3.9 Cost-Based Buy Decisions

1. 10 USC 2306a, Cost or Pricing Data: Truth in Negotiations

2. FAR Part 15, Contracting by Negotiation
   15.805 Proposal Analysis
   15.805-1 General

3. DFARS Part 215, Contracting by Negotiation
   215.805-70 Cost Realism Analysis
   215.9 Profit, 215.902 Policy

C.3.10 Protest System/Protest

1. 31 USC 3553, Review of Protests; Effect on Contracts Pending Decision

2. FAR 33.1, Protests
   a. 33.102, General
   b. 33.103, Protests to the Agency

C.3.11 Audit Rights

1. 10 USC 2306a, Cost or Pricing Data: Truth in Negotiations
   (f) Right of the United States to Examine Contractor Records:

2. 10 USC 2313, Examination of Books and Records of Contractor

3. 41 USC 254, Contract Requirements

4. FAR Part 52.215-2, Audit--Negotiation

5. DFARS Part 215.874, Follow-Up on Contract Audit Reports

6. DFARS Part 42.7005, DCAA Auditor Responsibility

C.3.12 Quality Assurance, Quality Control, and Inspections

1. PL 101-189, National Defense Authorization Act for FY90 and FY91; Section 824, Acquisition of Commercial and Nondevelopmental Items

2. FAR Part 46, Quality Assurance
   a. 46.102, Policy
   b. 46.201, General
   c. 46.202, Standard Inspection Requirements
   d. 46.401, Government Contract Quality Assurance--General
   e. 46.407, Nonconforming Supplies or Services

3. DFARS Part 246, Quality Assurance (246.102, Policy)

C.3.13 Warranties

1. PL 101-189, National Defense Authorization Act for FY90 and FY91; Section 824, Acquisition of Commercial and Nondevelopmental Items

2. 10 USC 2403, Major Weapon Systems: Contractor Guarantees

3. FAR Part 46
   a. 46.703, Criteria for Use of Warranties
   b. 46.709, Warranties of Commercial Items

4. FAR Clauses
   a. 52.246-17 I, Warranty of Supplies of a Non-Complex Nature -- Alternate I
   b. 52.246-18 I, Warranty of Supplies of a Complex Nature -- Alternate I
   c. 52.246-19, Warranty of Systems and Equipment Under Performance Specifications or Design Criteria

5. DFARS Subpart 46.7, Warranties
   a. 246.703, Criteria for Use of Warranties
   b. 246.770-1, Definitions

C.3.14 Delays in Prompt Payment

1. FAR Part 32.9, Prompt Payment
   a. 32.903, Policy
   b. 32.904, Responsibilities

2. FAR Part 52.232-25, Prompt Payment

C.3.15 Preference for New Development Versus Nondevelopmental Items (NDI)

1. 10 USC 2301, Congressional Defense Procurement Policy

2. 10 USC 2305, Contracts: Planning, Solicitation, Evaluation, and Award Procedures

3. 10 USC 2325, Preference for Nondevelopmental Items

4. FAR Part 11, Acquisition and Distribution of Commercial Products
   a. 11.002, Policy
   b. 11.005, Acceptability

5. DFARS Part 210, Specifications, Standards, and Other Purchase Descriptions (210.002, Policy)

6. DFARS Part 211, Acquisition and Distribution of Commercial Products (211.7002, Policy)

C.3.16 Inadequate Acquisition Training

1. PL 98-369, The Competition in Contracting Act of 1984 (amended 10 USC 2301)

2. PL 101-189, National Defense Authorization Act for FY90 and FY91; Section 824, Acquisition of Commercial and Nondevelopmental Items

3. Defense Acquisition Workforce Improvement Act, as included in the FY91 Defense Authorization Act

4. 10 USC 2317, Encouragement of Competition and Cost Savings

APPENDIX D

IMPACTS OF DFARS SUBPART 211.70, CONTRACTING FOR COMMERCIAL ITEMS, ON DOD ADOPTION OF COMMERCIAL PRACTICES

D.1 INTRODUCTION

Section 824(b) of the FY90/91 National Defense Authorization Act required DOD to develop new regulations implementing a simplified uniform contract format for the acquisition of commercial items and to require the use of such format to the maximum extent practical. In response, DOD has amended DFARS Part 211, Acquisition and Distribution of Commercial Products, by adding Subpart 211.70, Contracting for Commercial Items (interim rule, effective 28 May 1991). The interim rule also adds new contract clauses at DFARS Part 252.211 to implement the policy identified at 211.70.

This appendix analyzes Subpart 211.70 in the context of the commercial practices and inhibitors identified in this guidebook. Section D.2 highlights the commercial practices that DOD has incorporated in 211.70. Section D.3 addresses those inhibitors that have been eliminated or whose effects have been reduced by 211.70. Section D.4 discusses those inhibitors that remain evident in 211.70 and that continue to restrict DOD's efforts to be more commercial-like in its acquisition of commercial products.

D.2 COMMERCIAL PRACTICES ADDRESSED BY DFARS SUBPART 211.70

D.2.1 Best Value

Chapter 3 of this guidebook described best value as a practice that is already being incorporated into the DOD acquisition process. DFARS Subpart 211.70 explicitly states that it is DOD policy to "competitively acquire commercial products which best satisfy the Government's requirements, price, and other factors considered."

211.70 encourages factor evaluation techniques for both sealed bid and proposal solicitations. For sealed bids, it will be necessary for the Government to state its critical evaluation factors as minimum essential requirements in the Invitation for Bid (IFB). Then all responsive bidders can be judged as meeting the evaluation criteria, and thus an award to the low bidder will be an award based on best value.

When proposals are solicited, 211.70 directs that the Request for Proposal (RFP), ". . . clearly advise offerors that award will be made to the offeror whose offer is most advantageous to the Government. The solicitation shall identify all factors and any subfactors that will be considered in awarding the contract and state the relative importance the Government places on those evaluation factors and subfactors." Further, 211.70 directs that price and quality will be evaluation factors in every solicitation and, "solicitations shall be structured to permit consideration of the relative value to the Government of the warranty offered by each offeror."

211.70 places no restrictions on factors that can be considered for evaluation of proposals when proposals are solicited. Therefore, factors such as quality of past performance, proven production capability, use of a quality improvement process, and proven life cycle support and warranty compliance can all be evaluated in proposals. However, when bids are solicited, evaluation factors *must* be price related. The promotion of factor evaluation techniques in 211.70 supports the full range of best value evaluation processes. However, it will be up to the individual contracting officer (or solicitation preparer) to ensure best value evaluation is implemented in the Government's best interests for each solicitation.

D.2.2 Supplier Relationships

Supplier relationships are not explicitly addressed in 211.70. However, consistent use of a best value evaluation process and/or preapproved bidders lists will allow the Government to establish ongoing relationships with best value suppliers. To reap the benefits of long-term supplier relationships, contracting officers must support repeat business with suppliers of high quality, competitively priced products, and must not be encouraged to "spread the business around."

D.2.3 Contracting Practices

The purpose of 211.70 is to provide the Government with a standard form contract for the purchase of commercial items and a streamlined consistent process to make purchases. 211.70 describes a much more complex and detailed contract than in the commercial world. However, it is a much-needed step away from the normal

Government practice of creating a new, unique contract for each solicitation.

A positive aspect of 211.70 is the emphasis and reliance on the contractor's standard commercial practices. For example, 211.7004-1(c) states, "Solicitations . . . shall not require contract performance that is extended beyond customary industry practice for the product to be acquired." More examples of reliance on standard commercial practices is discussed in sections D.2.5, D.3.4, and D.3.6 below.

One drawback of 211.70 is the authority it grants the contracting officer to include additional contract requirements if he/she has determined they are essential for the protection of the Government's interests. This makes it possible for contracting officers to return to unique, overly-detailed solicitations that would completely defeat the purpose of a standard form contract.

D.2.4 Documentation and Specification Practices

A stated intention of 211.70 is to limit the Government's acquisition of technical data. The commercial practice is to acquire only that product documentation routinely included with the product. 211.7004-1(h)(1)(i) states, "Contracting officers shall not acquire technical data or computer software except: . . . " and goes on to list exceptions. These provisions apply to technical data in general, not only to commercial computer software and software documentation customarily provided to the public. This potentially ambiguous direction not to acquire additional documentation creates potential for including documentation requirements beyond the normal commercial practice that provide no real added value to the use of the product.

Chapter 6 discussed how commercial businesses usually rely on generic product descriptions, or, at most, functional specifications to describe a product. 211.70 is consistent with this practice by requiring the contracting officer in 211.7004-3, Part 1, to prepare the Section C of the Schedule as follows: "Include only specifications that describe the item in terms of the performance required and form, fit, and function or other essential physical characteristics . . ." Specifications requiring specific designs or manufacturing processes are prohibited.

D.2.5 Warranties

Commercial standard form contracts normally incorporate the terms of the supplier's customary product warranty by reference. 211.70 does not require the use of standard commercial warranties, but does state, "commercial items shall be acquired with the warranties provided to the public as customary trade practice if the customary trade practice warranties adequately protect the Government's interests." The implied option to use Government specified warranties, at the contracting officer's discretion, could be a cause for concern. However, 211.70 also states, "contracting officers preparing solicitations requiring offers based on a Government-specified warranty are encouraged to permit offerors to make alternative offers, based upon alternative warranty provisions, including an offeror's standard commercial warranty." This second provision relates to the use of warranties as a best-value evaluation factor. The effective use of a best-value evaluation process should allow commercial businesses

to propose more affordable standard commercial warranties instead of overly restrictive Government warranties.

D.2.6 Nondevelopmental Items

211.70 applies to contracting for commercial items, a subset of nondevelopmental items (NDI) as defined in 10 USC 2325. 211.70 defines commercial items as items sold or available for sale to the general public, those not yet available for sale to the public that will be available for sale within a reasonable period, and those requiring only minor modifications to meet the needs of the procuring agency. Without 211.70, a commercial item is required to comply with "proof of commerciality" criteria necessitating noncommercial practices such as the submission of cost or pricing data. Since 211.70 does not contain this non-commercial-like criteria, it should promote greater acceptance of the standard form contract by prospective vendors and result in greater response to solicitations using it.

D.3 INHIBITORS ADDRESSED BY DFARS SUBPART 211.70

D.3.1 Contract Clauses

211.70 is intended to "reduce the number of contract clauses that may be used in a DOD contract for commercial items <and> to restrict the number of Government clauses contractors must flow down to their subcontractors and suppliers." This is a recognition that the multitude of Government contract clauses and the requirements for flowdown are impediments to its ability to quickly and affordably procure commercial items. However, as discussed in D.4.2 below, 211.70 does not completely eliminate this inhibitor.

D.3.2 Specification Practices

D.2.4 above discussed how 211.70 requires the use of functional or performance-related specifications. 211.70 also includes provisions that are intended to ensure any commercial product that can satisfy a Government requirement is not eliminated from consideration due to Government over-specification. One of these, 211.7004-1(d), states the following regarding the use of specifications to acquire commercial items. ". . . Specifications shall not include: (1) Specific designs, manufacturing processes or procedures; or (2) Military standards or military specifications which would restrict a potential contractor's ability to satisfy the Government's requirements."

To counteract a tendency to over-specify requirements and thereby eliminate useful products from consideration, DOD included the following in 211.70: "When only one offer is received from a responsive, responsible offeror in response to a competitive solicitation, the contracting officer shall re-examine the market analysis and specifications for the commercial item to assure that the initial assumptions contained in the solicitation did not unduly restrict competition."

As important as these changes are, probably the most significant change is in 211.7004-1(k)(3). It states: "Specification changes shall be made only by a bilateral modification to the contract. . ." The Government right to require unilateral change has been a long standing impediment to more commercial suppliers selling their products to the DOD. These changes are very significant in the DOD becoming more commercial-like in its commercial products acquisition processes.

D.3.3 Data Rights

211.70 begins to recognize the rights of commercial firms not to disclose proprietary data, especially computer software data. For example, 211.70004-1(h)(2)(i) requires, ". . . contracting officers shall not require offerors or contractors to furnish information related to the commercial computer software or commercial computer software documentation that is not customarily provided to the public."

Further, 211.7004-1(h)(2)(ii) requires, "Commercial computer software and commercial computer software documentation shall be acquired, to the maximum extent practicable, under the same license provided by the software developer or distributor to the public. . ." While these provisions are an improvement in decreasing this inhibitor, D.4.3 below highlights what remains.

D.3.4 Data Deliverables

D.2.4 above discussed how 211.70 attempts to limit Government acquisition of data to that normally provided with the commercial product. Often the additional data the Government routinely acquires are documentation and drawing packages that would allow competitive reprocurement of a newly-designed item. This should not be required for commercial items that are produced by more than one vendor. However, it remains to be seen if contracting officers will comply with the intent of 211.70, or if additional documentation requirements will be added to standard form contracts as items, "essential to the Government's interests."

D.3.5 Cost-Based Buy Decisions

211.70 recognizes the forces of the marketplace to set a fair price. Therefore, 211.7004-1(i)(1) requires that, "Contracting officers shall not require offerors to submit certified cost or pricing data or require offerors to obtain certified cost or pricing data from their subcontractors or suppliers when competitively acquiring commercial items . . ." Consequently, any product meeting the 211.70 definition of a commercial item (as discussed in D.2.6 above) is exempt from submitting certified cost or pricing data. The absence of the "proof of commerciality" requirements and the acceptance of market-based pricing criteria are significant advancements in the Government's efforts to be more commercial like in its acquisition practices.

D.3.6 Quality Assurance, Quality Control and Inspections

211.70 heavily relies on contractor's standard commercial practices in the areas of quality and inspections. 211.7004-1(e) states, "Contracting officers shall not require contractors to comply with a Government specified quality assurance system or quality program . . ." Instead of specifying a particular quality process, the contractor is required to, ". . . maintain quality assurance systems adequate to assure that the items to be furnished under the contract conform with all contractual requirements." This puts the onus of responsibility to produce quality items on the contractor and allows for product quality and quality processes to be considered as best value evaluation factors.

211.70 states, "Government inspection of items acquired under this subpart shall be

limited to verifying that items tendered for acceptance conform to the contractual requirements. Inspection and test prior to tender for acceptance is the contractor's responsibility and shall be performed by the contractor in accordance with the contractor's standard practice. Therefore, solicitations and contracts will not provide for inspections or tests to be performed by the Government prior to the time the items are tendered for acceptance." This will virtually eliminate Government plant visits and inspections that interfere with on-going vendor operations. 211.70 allows "tailored inspection requirements" for items having "critical applications." However, as long as these critical applications items are limited to a few specialized products and tailored inspections take the contractor's standard practices into account, the spirit of 211.70's inspection provisions will still be met.

D.4 INHIBITORS NOT ADDRESSED BY DFARS SUBPART 211.70

D.4.1 Contract Clauses

D.3.1 above discussed how 211.70 has attempted to limit the number of clauses required to be included in contracts for commercial items. However, every contract written under this subpart must contain 34 mandatory clauses and up to 65 more as-applicable clauses for a possible total of 99 clauses. 211.7004-1(p)(1) limits flowdown of these clauses to those, "(i) clauses required to implement provisions of law applicable to such contracts; and, (ii) clauses determined by the Secretary of Defense to be appropriate for such contracts." Up to 24 clauses of the possible 99 may, therefore, be directly flowed down to subcontractors or suppliers. Considering a worst-case situation, even a contract with 99 clauses of which 24 must be flowed down is still a vast improvement over most Government contracts. This improvement, although significant, does not mean comparability. Commercial contracts usually impose fewer clauses and do not impose restrictions or add requirements on existing subcontractors or suppliers.

211.70 also allows the contracting officer to include, ". . . any other clauses that <he/she> has determined, in writing, are essential for the protection of the Government's interests in a particular contract." This provision is an invitation to include hundreds of additional FAR and DFARS contract clauses, and may inhibit the acceptance of 211.70 contracts by commercial businesses.

It is not only the sheer volume of clauses that inhibits Government access to commercial products. Many address concerns that are Government-unique, and which have no equivalent counterpart in commercial contracting. Examples of these clauses are Utilization of Small and Disadvantaged Business Concerns, Limitation of Liability, Price Reduction for Defective Cost or Pricing Data - Modification, Preference for Certain Domestic Commodities, and Transportation of Supplies by Sea. These require actions that interrupt the normal work flow of a commercial business. At a minimum this will raise the product cost or extend the delivery schedule, and could drive a commercial company away from Government business. Clauses that, by law, must be flowed down to subcontractors or suppliers create the potential to interrupt on-going supply contracts that must then be renegotiated, most likely at a higher cost. Unless the Government can agree to all

commercial terms and conditions that any other commercial customer would accept, it will never realize the full economy of the commercial market. The nature of the Government and the laws governing its acquisition practices will always inhibit its ability to act completely commercial-like.

D.4.2 Paperwork Requirements

211.70 authorizes the use of 19 representations and certifications. Three of these are mandatory and five may require flowdown to subcontractors or suppliers. Most of these certifications and representations provide proof of compliance with various federal laws. It is not the intent of these representations and certifications that is objectionable, but rather the additional work required to generate, record, and store the data necessary to provide the reports. Similar to the effects of contract clauses, these actions interrupt the normal flow of business and could therefore drive up product costs.

D.4.3 Data Rights

211.70 recognizes that the Government's insistence in acquiring full data rights with a product (especially computer software) can seriously jeopardize a commercial business's market share. It is not the Government's acquisition of the data that is the major concern, however. It is the Government's disclosure of that data to competing businesses that causes the loss of market share. 211.70 attempts to impose restraints on Government acquisition of technical data. It does not restrict any further disclosure of data that the Government does acquire. Fear of disclosure will inhibit commercial businesses with leading-edge technologies from doing business with the Government.

D.4.4 Warranties

D.2.5 above discussed how the use of commercial warranties is allowed, but not required by 211.70. 211.70 also allows for tailored warranties, "when commercial items are not customarily warranted to the public." Implementation of this provision would be in direct conflict with a commercial business's standard practice and may inhibit companies from doing business with the Government. 211.70 contains provisions for including tailored warranties for, "commercial items that are weapon systems." It then goes on to state, "the term 'weapon system' does not include commercial items sold in substantial quantities to the general public." This contradicts the initial requirement for tailored warranties.

D.5 CONCLUSION

211.70 is a significant improvement in DOD contracting practices. Longstanding items of contention between the Government and the commercial sector were addressed so Government requirements can be more easily satisfied with commercial items. Specifically worthy of mention is the elimination of the requirement for cost or pricing data and the complete reliance on commercial quality and inspection methods. In other areas, progress was made but inhibitors still remain. The most significant drawback to 211.70 is the freedom with which the contracting officer can add contract clauses or additional contract requirements based on individual discretion that such action is in the Government's best interest. It will take sound business judgment on the part of contracting officers to ensure that acquisition of commercial products is **not** "business as usual."

APPENDIX E

CASE STUDY: DESKTOP IV

TO BE DEVELOPED

APPENDIX F

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The notion that adoption of commercial practices can improve defense acquisition is generally accepted. However, concise, readily available information and guidance, specifically designed with the objective of enabling DOD programs managers to adopt commercial practices, is currently lacking. To help fill this gap, the Defense Systems Management College (DSMC) initiated a study of commercial practices with the goal of identifying practices that may be useful to DOD program Managers. Documenting the study resulted in this guidebook.

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